The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1430.—Vol. XXXIII. LONDON, SATURDAY, JANUARY 17, 1863. (WITH SUPPLEMENT) {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

Original Correspondence.

MINING PHENOMENA.

SIR,—There are several phenomena in connection with our mines which, perhaps, do not receive that amount of attention from scientific men they ought, nor do practical miners pay that attention to these phenomena at all times which the subject demands.

FIRST.—It is well known that by the aid of a kind of rod, called a "dowsing-rod," or by some a "divining-rod," many miners can find the back of the lode when the surface exhibits no appearance of a vein underneath. What is the cause? I shall be answered by many a man, no doubt, with a good-natured smile at my simplicity, and be told that men now class the dowsing-rod among the old tricks of "magic." From one of another class of men I once received a similar compliment when I had to ascertain the depth of a shaft, but could get no line; the means used—counting of the seconds between the drop of the stone and the return of the sound was considered magic by the brave man who attended me. But the depth was found as certainly as the rod in his hand would have pointed out the back of a lode. I again ask, what is the cause? And I will engage to prove the fact of the dowsing-rod finding a lode to anyone who chooses to pay the expense of sinking a few pits, but cannot engage to give him understanding. I am not aware that any scientific experiment has been made to attempt to set this often-asked question at rest. Mr. J. Y. Watson, F.G.S., was perfectly right in his letter to you a fortnight since, when he stated that we in this county attribute the bending of the rod to the electric current passing from the atmosphere into the vein, but I do not think, as Mr. Watson's friend suggested, that the "very constrained position" of the dowser's muscles has anything to do with the bending of the rod. I believe that when the rod is held by the "dowser" in an inverted position in the electric current *the poles of the rod or twig are inverted also, and that the tendency of the current to take its natural course over the rod, bends it towards the ground*, just as the tendency of the magnetic force brings the north pole of the needle to its own point when it has been inverted by force to the south pole. This idea may be quite wrong, but I say to the man of science—

"If I am wrong thy help impart
To find the better way."

SECONDLY.—The passage of electric currents through mineral veins was most satisfactorily proved about 30 years since, by that eminently scientific man Mr. Fox, of Falmouth: the experiments were conducted by Mr. W. Jory Henwood, who was then just entering on that course of close mining observation which has secured for him that well-deserved confidence which he enjoys to the present day. The object sought to be obtained by those experiments was, I believe, to ascertain if the strength of the current depended on the amount of metallic ores deposited within a short distance of the operator. I am not aware that any valuable results followed these experiments, but I have observed since another evidence of the passage of these currents through our mineral lodes. I refer to the formation of what we call "slicken slides." Those polished surfaces have been by some most absurdly supposed to be smoothed by friction; a moment's attention to the substance laid on would have convinced them of their error. I have sometimes thought that if the current could be analysed it might show some indications of the nature of the vein through which it had passed. Our old copper miners used to test the water from a lode for copper by dipping their shovels into it for a few hours, or the blades of their pocket-knives. I find that my idea that the slicken slides are formed by the electric current coincides with the opinion of my friend, Capt. Charles Thomas, who, some years since, sent a paper to the Museum of the Royal Institution, at Truro, on the subject, with some specimens of that substance.

THIRDLY.—It is a well-known fact that killas or clay-slate, greenstone, elvan, or porphyry, and granite, present a marked difference in those districts where our mines are rich, when compared with the enclosing rocks in those districts where the mines have been unproductive. The stratum through which a mineral vein passes is certainly a most important part of mining knowledge, and demands the most careful observation, and the most attentive study, and any advance in this department of mining knowledge will most certainly tend to make mining speculation more secure, and to prevent a practice which has been too often successful of bringing out a "bal" wherever a lode can be found. I suggest that a chemical analysis of the strata, greenstone, elvan, and granite, &c., between Camborne and Redruth, from each side of the Carn Brea range, and from the stopes of Carn Marth, in the Gwennap district, and also from the Caradon district, would be of considerable service to the practical miner, and if those scientific men engaged in mining have the time to devote to it, I hope they will render us this assistance.

In the practical observations of the surrounding strata of mineral veins many men have, from time to time, paid some attention, but the most laborious student of this subject that I know of, as well as of the *direction* of mineral veins when most likely to produce rich deposits of ore, is Capt. Charles Thomas, of Dolcoath, who, a few years since, gave the mining world the result of his observations in a pamphlet of 35 pages. His observations on the effect that the magnetic bearings of lodes have in their deposits of metallic ores, and also in the kinds of killas most congenial to the production of copper and tin, and in the kinds of granite in which copper and tin may be found, and in that kind of granite found in and near the centre of granite ranges, or hills in which metallic ore of much value have not been found, agree with the observations generally of most of the unprejudiced observers of mineral veins in this and the next county; and though there may be found many *apparent* exceptions, and even some *real* ones, to his general observations, yet the man who will do for his own locality what Capt. Thomas has done for Cornwall will certainly confer a great benefit on mining; and a collection of these remarks may enable some future Newton to point out the connection between these phenomena and the great principles on which depend the *deposit of mineral ores in lodes*, and give us a Mining "Principia." The most important exception to Capt. Thomas's observations appears to occur at South Caradon, as stated by the agents of that mine in the *Mining Journal* a few weeks since. They remarked that they saw a difference between the granite which Caradon Hill is composed of and the granite in which such great quantities of copper ores have been raised in that mine—that is, I presume, they see but one kind of granite. There is *really* no difference between these granites. Can they, or anyone else, show cause why in all the north lodes in that mine, and the north lodes in East Caradon, nothing has been worked under the body of the hill, which even in that part is not the main rock of the hill after all? The main rock is lying still further north, to the east of Gonamena Mine. And, further, can they say how the Caradon Mine, on the summit of the hill, has never yielded ores to pay the expense of working? I observe by looking at Symons's Mining Map of the Liskeard District, recently published, that about 400 fms. in length remain wholly unexplored between the South Caradon and East Caradon Mines, on the northern part of those setts, and that the deep parts of South Caradon, on the north lodes, are at the west foot of the hill, and *near the cross-courses*, but that the caunter and Kitto's lodes, lying on the nearly flat ground south of the hill, have been worked on to nearly the eastern extent of their sett, and that the East Caradon courses of ore are exactly in the same circumstances at some distance from the hill, and also on the flat ground. Is it too much to say that these ascertained conditions of the lodes in these rich mines tell their own tale, which observing miners can understand, and wonder that the South Caradon agents cannot understand also? A glance at Symons's Map will convince any unprejudiced person that barrenness apparently reigns supreme in the Caradon Hill proper, as well as in the Carn Marth in Gwennap, Carn Menellis in Wendron, Carn Brea in Redruth, Carn Entral in Camborne, Tregonning Hill in Breage, and Castle-an-Dinas north of Penzance, showing clearly enough that the kind of granite found in and near the centres of those hills is barren of metalliferous ores, while other kinds, on the slopes of these hills, are highly productive. Is there not a cause? Many intelligent miners know there is, and will hesitate before they admit that the Caradon district forms an exception to the general observations made by Capt. C. Thomas.

Before I close this note I wish most distinctly to state that my remarks have not the least tendency to depreciate the value of the rich mines in the Caradon district, nor do they depreciate the value of Dolcoath or Carn Brea, when I say that the south and caunter lodes in these mines are of little value when they enter the kind of granite at the foot of Carn Entral and Carn Brea Hills. There is sufficient spaces in the slopes of those hills to open mines for, perhaps, ages to come.

My object in troubling you with these remarks is not to raise a controversy with anyone, to which I have no time to devote, but to call the attention of young men, and any persons who may have neglected to observe these facts, to what I consider a most important part of mining science, and one which can only be obtained by close observation.

I quite agree with the remarks lately made in the Journal, that a proper attention to the composition of the enclosing rocks, their fracture or cleavage, the gossan, composition, width, and magnetic bearing of our lodes will, in eight cases out of ten, prevent the opening of *non-productive mines*, but we have not yet attained that knowledge to prevent us from opening mines that will not pay the cost of exploring. JOHN TONKIN.

Pool, Jan. 12.

WORKING COAL—"PILLAR AND STALL" v. "LONG WALL."

SIR,—Mr. Naysmith seems to be at a loss to know what I have said in opposition to his so-called pillar and stall system, or what, as a conscientious man, I can say. Were I to speak in general terms I could not possibly say much more against the system than what I have already done. But, to deal with the subject in a fitting manner, it may become necessary to enter into the objections *seriatim*; and as my object in entering into discussion was to endeavour to correct the erroneous statements made both by Mr. Naysmith and Mr. Shepherd, I will adopt that course. If Mr. Naysmith's diagrams have only been reduced in scale, as he stated in a former communication, the want of a scale to his diagrams may be somewhat compensated for, by taking the width of the bords or stalls at from 6 to 8 yards, and each one finding out the scale for himself. I admit that it is not a very satisfactory method of dealing with any subject; but since Mr. Naysmith has declined to furnish your readers with any other mode of ascertaining the length that each current of air would have to travel in passing through the workings, or the area of coal that is supposed to be wrought, we are compelled to adopt the only course left open to us. Mr. Naysmith appears to lose sight of the fact, that to make the splitting of a current of air the most effective, it is necessary to split it as near to the downcast shaft as possible, and allow each split or division to pass through a separate part of the workings, returning either direct into the upcast shaft or into the main return air-course at the nearest possible point to the upcast. Without attention being paid to this method of splitting a current of air you rob the principle of its chief advantage, by not increasing the sectional area through which the air travels. If we examine what Mr. Naysmith calls the most perfect system of ventilation, we shall find that he splits or divides one current of air no fewer than four times in a distance not exceeding 350 yards; and that after passing each split or division of air through the intricate windings shown upon his diagram, he allows them to return into what he terms the main return airway. I think I am fairly entitled to use the word intricate, since, according to Mr. Naysmith's diagram, one division of air would have to travel from leaving the intake air-course to returning into the return air-course a distance of 1450 yards. For a considerable portion of that distance the only means of keeping the air in its proper course, and conducting it to the working faces, is a wall built of loose materials. Perhaps I cannot do better than give Mr. Naysmith's own description:—"The little brass and other rubbish found in the coal is built up in the form of a wall by the side of the tramroad, and all the small coal dust, &c., is thrown in behind it." If your readers will exercise their reflective powers but for one moment, they will at once see the difficulty of making a wall of that description anything like air-tight, and if not air-tight, of realising the consequences. Let us next enquire how Mr. Naysmith becomes possessed of as much brass, dust, &c., in working away 6 or 8 yards of coal that will build a wall which not only serves for a partition for conducting the air as the stall advances, but also assists in supporting the roof. According to Mr. Naysmith's own admission, not less than one-sixth of all the coal wrought must be used for no better purpose than that of building walls, to be for ever lost or wasted. This admission is of itself sufficient to stamp Mr. Naysmith's reputation as a mining engineer, and to sound the deathknell to his cherished system.

Returning to the ventilating department, let us enquire from Mr. Naysmith why he has only two main air courses, one for the intake, and the other for the outgoing currents of air, one of which must be used for a water level, air and wagon-road, unless they are so highly favoured at the collieries where Mr. Naysmith has gained his experience as not to be troubled with water. If that is the case, Mr. Naysmith ought to have stated the fact, for it would be difficult, indeed, if not impossible, to advocate a more dangerous principle than that of allowing the water level to be a main air course, as shown upon Mr. Naysmith's diagrams. If all the victims to this system were to rise in judgment against it, such a scene of wretchedness and misery would be presented that has never been occasioned by any other single cause in the mining world. Next to that, however, may be ranked the principle of getting coal so as to convert the workings nearest the shaft into a series of huge gasometers, while the coal is removed panel by panel up to the boundary, an operation in most instances that extends over many years, during which time the security of each individual workman depends upon his being trained to work in the midst of danger that is not to be equalled in the manufacturing of gunpowder; besides which the delicate construction of the safety-lamp sometimes renders the greatest care futile, or the recklessness of a single workman places both his own and every other person's life engaged in the mine in the greatest jeopardy. This principle is beautifully illustrated in Mr. Naysmith's diagram, descriptive of the pillar and stall system, and to which can be traced some of the most disastrous explosions that have ever occurred in this country. If this system were abandoned we should cease to hear of sudden outbursts of gas, sufficient to cause explosions such as have been attributed to this cause. In keeping with the other principles of Mr. Naysmith's perfect system of ventilation, he describes his stoppings in the cross-cuts between the heading and level as being 4 or 5 yards from the bottom; from what motive they are made so far from the bottom, save that of converting the bottom part of each cross-cut into a receptacle for gas, and thus making his whole system to harmonise, I cannot infer. Besides the extraordinary quantity of coal that Mr. Naysmith confesses to converting into small coal and dust, in driving his bords or stalls, he says nothing of the quantity that must of necessity be reduced into small in working back the pillars. That the loss in working back the pillars must far exceed that occasioned by driving the bords or stalls must be admitted; for whatever kind of roof overlies a seam of coal, removing one-half of the coal in driving must cause the weight of the roof to press with greater severity upon the other half. Independent of this cause, there is also the effect produced by the weight proceeding from the gob or goaf where all the coal has been wrought. After seeing the evidence adduced by Mr. Naysmith, and going carefully into the subject, I am not surprised that Mr. Shepherd should have made such charges against the mining engineers of South Wales as he has done, providing they are fairly represented by Mr. Naysmith. Mr. Naysmith says, "I do not wish to dictate to any person how coal should be worked elsewhere, but I cannot and will not allow that any person from any part of England who has not had practical experience in Wales is so qualified to give an opinion as to the working of different seams as a person who has had many years practical experience in England and in this country."

Mr. Naysmith, this might have served you for a loop-hole, had it not been for the remarks made by a disinterested gentleman, whose knowledge of coal mining in all its phases is second to none that this country can boast of. I refer to the remarks of Mr. Dickinson, Government Inspector of Mines, who says, in the discussion following the reading of my paper—"There are places where the waste is not only more than 5 per cent., but I know of my own knowledge that there is actually in thick and tender seams in South Wales one-half of some of the best steam coal in this country being left in the ground crushed, spoiled, and irrecoverably lost. That is by pillar and stall, whilst in the same colliery I have taken comparative results of the coal got by the long wall system, and I can state that almost the whole of the coal was obtained, and scarcely any lost." I do not for one moment bring into question the truthfulness of Mr. Dickinson's statement, yet I attribute the great waste of coal to the defective manner in which the pillar and stall system was carried out in the collieries referred to, as in Mr. Naysmith's case. That there is no necessity to waste more than 5 per cent. by the pillar and stall system, unless in exceptional cases, is an indisputable fact. But instead of this being in favour of Mr. Naysmith's position, it militates very much against it, by showing that the best is not made of the system he professes to understand. Mr. Naysmith says I have tried to insinuate that he was nothing better than a pupil. If Mr. Naysmith has guided me wrong he ought to apologise rather than accuse me of any such thing. I contend that the sentence I got my information from is capable of no other construction. I will take the liberty of quoting it, so that each of your readers may judge for themselves:—"I may say all the opinions I expressed in my paper of Nov. 29 have been derived from practical experience in South Wales and the county of Durham, and under the guidance of some of the most experienced mining engineers of the day." I think that even Mr. Naysmith himself will be unable to put any other construction upon it. He also charges me with being personal in my remarks. In reply, I may say that I do not often complain of anyone being too personal with me; yet I think, on again reading over Mr. Naysmith's letter of Dec. 13, I have quite as good grounds for so doing as he has. Mr. Naysmith naively remarks that the long wall system he was condemning was not skilfully conducted, and that there are many different methods of working the long wall system, and adds—"Did I ever say in any of my papers that it was the most improved method of long wall working." Perhaps not, Mr. Naysmith; but you ought to have known that it would be equally unfair to charge the long wall system with any unfavourable results owing to the want of skill in conducting the principle, as it would be to condem the pillar and stall system because the results have not been favourable in the cases cited by Mr. Dickinson, and practised by you. Even this admission would have come with better grace had it been made before Mr. Naysmith was either forced to admit that he did not understand the subject he was writing about, or compelled to exercise his inventive faculties. Mr. Naysmith says his object was to confute the arguments that Mr. Shepherd had brought forward against the mining engineers of South Wales. Well, I will leave it with your readers whether Mr. Naysmith has displayed good taste, to say the least of it, in endeavouring to mislead the public respecting the merits of the long wall system, however laudable object might be in endeavouring to silence Mr. Shepherd. Mr. Naysmith may remember when a few hundred yards of brattice cloth would have done him good service, but I think that scarcely meets the case; it is against using the space set aside for discussion, &c., as an advertising medium that I complain. Mr. Naysmith asks me a few questions respecting what he calls the wonderful colliery. In reply to the first question, I can only observe that my offer was of so liberal a character when I stated the few facts in connection with it that I have nothing more to add, excepting that the resident manager was a North countryman, and old enough to have been one of Mr. Naysmith's guides. In reply to the second question, I may remark that the gets are from 150 to 200 tons per day, and that they are not materially different now to what they were at the time previously described, and that we are now working the colliery upon the pillar and stall system, yet a plan of the workings would present a very different appearance to Mr. Naysmith's diagram. The seam is rather more than 4 feet in thickness, and in newly-opened workings gas is freely generated. Mr. Naysmith asks what I was doing with a candle in such a place? My reply is, that I had first ascertained that a considerable quantity of carbonic acid was being given off, and that it would be perfectly safe to adopt that course of testing the circulation of the air. Space will not permit of further remarks, or I should have gone more fully into the subject.—*Jan.* 7. JOS. GOODWIN.

COLLIERY EXPLOSIONS.

SIR,—In last week's Journal I note an article, written by Mr. Thomas Stephenson, on "A few Thoughts and Suggestions to Sir George Grey, Home Secretary," in which he asks—"Are these fearful catastrophes unavoidable?" and answers—"Surely not." I fully concur in the answer: and am prepared to prove that explosive gas can be removed from any part of a mine to the surface of the pit without the aid of a fan or furnace, and without the dangerous system of mixing it with the ventilation. I have discovered that gas and water are identical in their relative states—water will find its level on the low parts of a mine, gas will float on the atmospheric air, and will ascend to the high parts of a mine, and if left in a state of repose will not mix with the air. I have found out that gas can be removed from its level as easily as water can be removed from its level by a syphon. By inverting the syphon, the short leg is immersed in a goaf or reservoir of gas, and the long leg fixed up the pit to the surface, and by removing the atmospheric air out of the syphon a current of gas will commence flowing out at the end of it, and will continue flowing as long as any remains in the goaf or reservoir. I have patented the invention, and have operated on one pit at the Bwllfa Colliery, at Aberdare. The enclosed testimonial will testify the value of my invention:—

"*Bwllfa Colliery, Aberdare, Dec.* 11, 1862.—I have much pleasure in stating that the apparatus erected by you at my colliery, for the purpose of practically experimenting and testing the principle of your invention for extracting gas from coal mines, may now be seen in successful operation; and where any gentleman interested in this important matter is at full liberty to examine its operation both above and below ground, and thereby satisfy himself as to the beneficial results to be derived by the application of Mr. Williams's very simple and effective invention.—E. LEWIS."

The quantity of gas flowing through a pipe of 1½ in. diameter was 3000 cubic feet per 24 hours. I will undertake to remove any quantity of explosive gas from any part of a mine by my plan as fast as it is evolved in that part. In half-an-hour after my apparatus is properly fixed the gas will commence flowing, without the aid of fan, furnace, or any kind of machinery. I will meet any committee of scientific gentlemen, and prove to them by a working model that if they adopt my plan the danger of explosions may be reduced, if not altogether done away with. Or I should prefer, if they would find me the material I require, to experiment on one of the most fiery mines they can find. I wish it particularly understood that my plan will not in any way interfere with the present system of ventilation. Where there are accumulations of gas I can remove them.

Blaenavon, Jan. 12. JOHN G. WILLIAMS,

SPANISH REVISED TARIFF—REDUCTION IN COAL AND IRON.

SIR,—On reference to my memoranda, I find that, in last week's Journal, I sadly underrated the import duties on foreign iron admitted into Spain, and that the late tax should have been as follows (say) upon—

Pig-Iron	Per ton	£ 2	1	8
Bar Iron		10	9	7
Hoops and sheets		10	16	3

the above being delivered under a foreign flag.

Since my last communication, I find that official notification has been received by our Government of a compromise of the *intended* reduction, so that, until March 1, 1864, the duties upon foreign iron will stand thus:—upon

Pig-Iron	Per ton	£1	9	4
Bar-Iron		7	7	11
Hoop and sheets		8	12	6

consequently, the reduction between the old and new tariffs will be—on

Pig-Iron	Per ton	£0	12	4
Bar-Iron		3	1	8
Hoops and sheets		2	3	9

which is little more than half the sum originally proposed; the retention, however, of the present scale of duties will enable the Spanish ironmakers to keep their heads above water; but, from the arguments adduced in my last letter, it is very questionable whether any further reduction will be made, if, indeed, the present modification will be sustained. E. T.

Jan. 15.

SOUTH AUSTRALIAN COPPER MINES.

SIR,—The two extracts from South Australian newspapers, descriptive of some of the copper mines of that country, which appeared in last week's Journal, will doubtless have been read with interest in the mining districts of this; and it is probable that the following comparative statement of the results of copper mining in Great Britain and in South Australia may not be devoid of interest also.

Mr. Robert Hunt, F.R.S., Keeper of the Records of the School of Mines, stated, before the Society of Arts, "that in the year 1861 the copper mines of the British isles afforded employment to 22,000 persons, and that they produced 231,487 tons of ore, containing 15,331 tons of fine copper." He also stated the value of the ore to have been 1,364,727*l.* These sums give for each person employed just 14 cwts. of copper, or 62*l.* in money.

The official statistics of South Australia show that in 1861 the exports of the produce of its copper mines were—

	3052t.	7c.	of fine copper, valued at	£294,572
7817¼ tons of ore, containing	1572	0	of fine copper, valued at	133,749
390 tons of regulus, containing	238	0	of fine copper, valued at	19,125
	5162	7	of fine copper, worth in the colony	£447,446

During that year the number of persons employed on the mines was 1820, consequently, the proportions of copper to each was about 76¼ tons, and of money nearly 246*l.* It should be known that in that year very little, if any, of the produce of the new mines had been brought forward. The Wallaroo, the Moonta, the Yudanamutana, the Blinman, and the mines now possessed by the Great Northern Mining Company, were little known, and hardly opened; but as most of these and many others are now furnishing large supplies of ore of extreme richness, it is reasonable to expect that the returns in these following years will be greatly in excess of 1861.

Any comments upon these facts would be useless; they tell their own tale, a tale well worthy of being carefully read and considered both by adventurers and workers in the British copper mines. The extent of the copper deposits in South Australia may be said to have no other limit than the length and breadth of its 300,000 square miles of surface, while their proximity to that surface will account for the large returns received from them, with little aid from either science or machinery. If some of these most necessary appliances to successful mining, which are now, as may be said, uselessly wasted on many of the unproductive mines in these counties

were transferred to that, accompanied by the skilled labour that is being equally wasted, it requires no skill to predict how vast would be the improvement in the condition of the persons having wisdom and energy enough to adopt that course. —— AN AUSTRALIAN MINER.

THE BRENDON HILLS.

SIR,—In last week's Journal you mention the late Mr. E. Rogers as the discoverer of the "red ore" of the Brendon Hills. This is an error. This red ore, which is merely spathose ore deprived of its carbonic acid, and which red ore alternates with the white or sparry carbonate of iron in the lodes of the Brendon Hills, was first discovered and worked by the Flemings about the time of the Crusades. From that period the mines were neglected until they came under my notice about eighteen years ago, and not long afterwards I made an offer of them to Mr. Thomas Brown, of Ebbw Vale, for 2000*l.* That gentleman, however, declined my offer; but some years afterwards he made an arrangement with Mr. E. Rogers, paying that gentleman a life annuity of 1000*l.* per annum, as a reward for his having brought the matter under his notice. After I had employed this red ore, as well as the spathose ore, both in the manufacture of steel and iron, and before Mr. Rogers had even heard of its existence, a Mr. Smith Tibbetts worked some of the lodes, and sent the ore into South Wales, where it was called "Tibby's ore," and acquired rather a bad name, because it was not properly understood. The final possession of these tracts of red ore and spathose iron ore by the Ebbw Vale Iron Company put into their hands virtually the monopoly of the steel trade of the whole world, which was secured to them under my patent process for adding spiegel eisen to Bessemer metal, the red ore producing spiegel eisen of the very finest description. This process, combined with the pneumatic process, makes the production of masses of homogeneous iron and steel of any size as simple as a common foundry operation, and almost as cheap; and this is the greatest metallurgical improvement which has ever been originated, and in comparison with which in a few years the puddling process will sink into insignificance. Had the Ebbw Vale Iron Company done but common justice to my inventions and to myself, they would now have been turning out 4000 tons per week of steel rails, at a nett cost of 5*l.* per ton. The pneumatic process, and the extent to which it may be adopted, is at present but little understood or appreciated. It is, however, most simple, and its details are as easily carried out as the operations of an ordinary iron foundry. ROBERT MUSHET.

HOPKINS'S IMPROVED PROCESS FOR THE EXTRACTION OF GOLD FROM QUARTZ, PYRITES, BLENDE, &c.

SIR,—In last week's Journal a correspondent, signed "A. B. C.," makes enquiry about the results of my process. I beg to inform him that my process is in successful operation at the Cambrian Mine, and is highly satisfactory. I shall be happy to show the process to him or to any other gentleman on my return to Dolgelly. It is capable of extracting from 75 per cent. and upwards of the gold from the poorest materials, not merely from quartz, but from the heavy minerals, such as pyrites, the grey oxide of iron, &c. It is a very easy matter to extract gold from pure quartz, and especially if rich. Indeed, the whole contents of gold may be extracted with facility from rich clean quartz, but it is not so easy to do so from poor pyrites and other sulphides and oxides. Yet the stamper (J. Pascoe, whom I have trained at the Cambrian) has treated many tons of quartz, with pyrites, &c., containing only 40 grains per ton, from which he has extracted about 30 grains per ton, although the gold was found as impalpable as yellow paint or diluted gamboge. The reason why the operations of the company are going on so quietly is simply because the rich parts of the properties have not yet been laid open by the mine agent, and not for the want of a satisfactory process to extract the gold.

The establishment is almost complete, and trials are being made in samples of 20 tons each. The raw materials are carefully sampled and assayed on the spot by Mr. Reay, who is thoroughly capable of ascertaining the contents in gold. The products are melted by him, and the results are known at once as correctly and expeditiously as in the best foreign establishments. Although the arrangement for the final cleaning by batea is not quite completed, nevertheless, even as it is, I have no hesitation in stating that the stamper could with the present mill reduce about 60 tons per week, and extract the gold at a cost not exceeding 3*s.* 6*d.* per ton; and, with machinery to reduce 500 tons per week, the cost of extraction might be reduced to about 2*s.* 6*d.* per ton: 80 per cent. of the gold and upwards may be obtained, especially should the mineral contain by assay on an average (say) 6 dwts. of fine gold per ton.

Those parties who write from California and Australia, stating that they have large quantities of rich pyrites from which they cannot extract the gold, may do so with facility if they adopt my improved process. Stampers may be obtained to go out to carry on the operations, and I should be happy to make arrangements with responsible parties which would be to our mutual advantage. As the Cambrian Company is now engaged in testing the value of large samples, preparatory to more extended operations when the veins are laid open, the agents cannot be interrupted by frequent visitors; but a few gentlemen who have a special object, or who may be connected with foreign gold mines, may witness the treatment at any time, if they bring letters of introduction.

My process is not necessarily confined to the use of stamps, although I believe stamping is the simplest and cheapest mode of reducing poor auriferous substances, yet if parties prefer other kinds of crushers they may adopt them, provided they reduce the stuff fine enough to be received diluted in my prepared incline planes. No quicksilver is used, and all the minerals separated, and if of value retained. I trust this explanation will be sufficient for your correspondents for the time being. EVAN HOPKINS.

Dublin, Jan. 13.

MINES AND MINERS, AND THEIR KNOWLEDGE OF PRACTICAL GEOLOGY.

SIR,—It is well known that all the sections of mines and collieries of the United Kingdom have been made and supplied to the geological surveyors by practical men, and that all the coal basins and the seams and faults were discovered by them, and not by professional geologists. This being a fact, I was much surprised at reading the following observation in Mr. Reay's letter, in last week's Journal:—"It would be difficult to estimate the enormous value of the coal which has been found by a due attention to the laws of geology, and the sums saved which would, without geological aid, have been spent in fruitless search for coal where it could not exist." Will Mr. Reay kindly tell us where and when such discoveries were made by book-learned men? This is the question at issue, and not the value of practical geology.—*Jan.* 12. —— A VIEWER.

THE SCIENCE OF MINING.

SIR,—It is the generally received opinion among geologists that of all men practical miners are the most theoretical—sceptical to a degree with reference to the so-called scientific truths propounded by that learned conclave, grossly ignorant of all the laws regulating the deposition and distribution of minerals in the earth, groping about like the blind Cyclops, and, therefore, unable to decipher the words which Nature has written on her tables of stone. Mr. Hunt tells us, however, that the written word is yet a sealed book to the philosopher, as well as to the miner; that the former, commanding extensive means, gifted with high and cultivated powers of mind, and placed in a position to gather all the materials necessary to push him onward and upward in the path of enquiry, has been able only to give expression to vain guesses, based on very shadowy hypotheses, which frequently lead us away from the truth; and the latter, no matter how great his experience, how keen his powers of observation, or how much he may have studied the great volume written in picture, has dealt only in vague generalities, which may mean anything—mere idle speculations, which can never lead to the interpretation of Nature's vocabularly. Here we are, then, geologists and miners, on a perfect equality—all blind; no wiser now than in ages past, shrouded in darkness, and no sign of the approach the "the cloud with a silver lining." To be a fixture, either physically or mentally, in these progressive days gives one an idea of imbecility, and shows that we have failed to comprehend the meaning embodied in the words "purpose of being." Force of circumstances will account for our shortcomings; but for the men in high places, gifted as we know them to be, and whose lives have been set apart for the peculiar purposes of research and study of the different phenomena involved in the science before us, who will offer an excuse? How analogous is our position to that of our own tight little island, immoveable, and surrounded by deep waters? But here the simile ends. Ours is a sea of ignorance, with impassable rocks and reefs on every hand,—schoolmasters who cannot teach, captains who do not understand navigation, sailors who call the cable the anchor—the result being that no sail has left the port; every hulk has swung on its moorings for at least a century. But will England's gifted sons continue to merit this opprobrium? Must her sons of toil burrow on to the end of time without some ray of sunlight? Are we to leave no legacy to our grandchildren, no stepping-stones in their pathway, no monuments of our industry, perseverance, and acquirements on the great battle-field of life? If we do not now understand those mysterious characters, that writing against the wall of every mine, and which is impressed upon every leaf and stony tablet in the structure of the globe, it does not follow that we must sleep on in our ignorance—rather let us endeavour to acquire some knowledge of their signification, and arrive at some clue that shall assist in translating some few of those hieroglyphics; then we shall have established data on which to rear up a knowledge, the influence of which shall be felt by minds now hid in the vista of futurity. "Resolution," says a writer, "is omnipotent;" and if, instead of complaining of the dearth of wisdom in the professional hemisphere, we make the most of our own powers and capacities, and embrace and improve all our leisure moments, we shall find that there is no end to our progress. The mantle of ignorance handed down to us by our progenitors (one would think by entail) will be torn into a thousand shreds, and flung back into the past; the dark shadow of preconceived opinions, that has dogged our footsteps, scattered to the winds, and man, thus stripped and unshackled, with all the digestive machinery of the mind in full play, his mental pabulum ripe unto the harvest, will indeed feel that to live is to learn. There is a distinction of equality of mind as well as of birth; but while the philosopher is developing the law of gravitation, elucidating optics, or composing the Principia, the dwarf in intellect, if he will it, may dress or chisel out some little stone that shall become a necessary adjunct in the great temple of the world of mind. The tornado sweeps along, lashing old ocean into fury, the influence of which is universal; the vessel, gliding smoothly over the waters, sends up a ripple that presses against the wave, and that against the next, until the whole volume is affected in the same ratio. Mind acts on mind, matter on matter, and as soon as we are able to appreciate the truthfulness and beauty of these facts we shall feel that we do not live for ourselves alone.

I have already questioned the Professionals. I now take the liberty of asking what have our leading Practicals, as a body, done to enlighten our mining populations, to spread the seeds of knowledge over the land, and to infuse into the minds of those who have to toil deep down amid the mine those elevating influences necessary to teach them how to throw off the chrysalis shell, and march forward becomingly proud of the dignity of human nature? I can imagine how interesting it must be to men possessing great minds, grasping intellects, and highly-developed reflective faculties, to indulge even in fanciful wanderings, to go soaring up amid the vast space in which roll all the stars, and picture to themselves the magnitude, motions, and distances of all the bodies in the solar system, and see how they revolve round the sun, agreeable with the laws of attraction and trangential impulse. There being no limit to thought, such minds wing their way to regions still beyond, and go back to that period in the history of the creative mind, so to speak, when this planet of ours did not exist, when there was no rocky matter, no minerals or metals, no oceans or rivers—when all that now enters into the constitution of a piece of granite, or sparkling diamond, which forms the lovely petals of a tiny flower, or trunk of a giant tree, were as transparent as the air we breathe, occupied space as an aeriform fluid, or a stupendous globular sea of atoms. A philosopher tells us that this earth, as seen by the Infinite, is a transparent law. What a stride the finite mind will have made when it shall be able to demonstrate the passing of the first act in the construction of that law. Will Mr. Reay attempt to resolve the matter, uplift the curtain for the first time, and admit the miner to the great scene in the drama of world-making? Being a very learned man, and especially an eminent chemist, perhaps he will define to us the state and condition of things previous to chaos; reveal whether the laws which produced that chaotic mass were exclusively physical or otherwise; if chemistry was a co-worker, how, and in what degree, its influences were felt; tell us if there was any rocky matter in that which was without form and void; and if, when the waters were separated, and the dry land appeared, the granite, which stood alone in its crystalline beauty, showed any evidence of its having submitted to the operation of fire. With right conceptions on these heads, we might be able to train our minds to correct modes of observation, and possibly have philosophy enough to establish a theory of geometry, physics, and chemistry, as would be of infinite importance in our pursuit of the science of mining. Instead of feeling that we require no further instruction or enlightenment than the little we now possess, we are always glad to ask it of anybody. To show that I am in earnest, I beg Mr. Reay to enlighten me on the following:—What has Lindley Murray to do with the language of the rocks, or the filling matter of veins?—*Minsterley, Salop, Jan.* 12. MINER.

IMPROVEMENTS IN PUDDLING-FURNACES.

SIR,—Some few weeks ago it was announced in the Journal that some improvements in the erection of puddling-furnaces had been introduced by Mr. Wm. Davies, of Llanelly. No doubt he has made an alteration, but whether for the better remains to be learnt. But how his arrangement can be claimed as new I am at a loss to understand, as it has been employed by many others, and amongst them by Mr. Spence some 12 or 13 years ago at Briton Ferry; the bars might differ as regards position, but they are essentially the same in principle. Nevertheless, if the invention be really useful, and will tend to economise both labour and material, Mr. Davies deserves well for the renewal of the idea. I know one extensive ironworks, at which I was employed a few years since as a puddler, where improvements are much needed, and, perhaps, Mr. Davies's arrangement might be profitably introduced there, and the present loss of 7000*l.* or 8000*l.* per annum avoided. If, however, he wishes to advance honesty, and to give scope to intelligence, he will find that, owing to our moral and physical degradation generally, no human beings are more coarsely treated or more systematically tormented.

If managers and agents would conceive ideas by more closely watching the effect of matter, and its motion of different elements, instead of so frequently borrowing so much of their superficial knowledge, we should, in all probability, be living in happier days. Perfection is sometimes hoped to be attained by copying long-established works, it being concluded that practice must have led to the remedying of all inconsistencies, and the consequence is furnaces are sometimes made some 8 or 9 ft. long, though to correspond to the coal they should be 12 or 13 ft.; whilst at other times they make furnaces 12 or 13 ft. long in places where the flame of the coal will not afford any practical heat more than from 7 to 8 ft. Probably these furnaces contain in the interior half-a-dozen different degrees of temperature, so that from the same parcel of iron half-a-dozen qualities of iron are produced. If the combustion were more practically directed through the interior of the furnace all would be effected by one heat, and felling might with skill and care be always dispensed with. It is the contracted action of the heat that destroys one part, and leave others not in the least deteriorated; this is the cause of so much felling being required. I am aware that my statements may be considered by some to be exaggerations, but permit me to state that the truth of the whole I am fully prepared to substantiate at any time. The system of puddling as pursued in this country has a greater tendency to ruin the employer and degrade the operative than anything I can imagine.—*Maesteg, Jan.* 12. — B. ROGERS.

GOLD MINING IN WALES.

SIR,—Having read the various reports of the different mines, and of the existence of gold in Wales, it appears to me that conclusions have been drawn by the comparison of quartz, minerals, &c., containing gold and not containing gold from the various lodes, and as far as I can understand these are the only means that have been taken for arriving at conclusions; there has been no seeking for the real cause that affects or produces the precious metals in the lodes, and for this reason I describe my little knowledge on that point; it being my wish, for the sake of the principality, that every shareholder interested in gold mining should be handsomely rewarded for his energy and enterprise.

Visible gold exists in various minerals and matrices in Wales—lead, copper, blende, mundic, quartz, talcose schist, carbonate of lime, clay-slate, and alluvial. This I have seen, but to compare the matrix lead, copper, or blende, &c., as a safe guide for the existence of gold in one mine, because another having matrices of similar character contain gold, in my opinion such a course is not safe, though it may probably be some guide. Let us seek the cause that produces the runs or shoots of gold, and we may be enabled to discover many more mines similar in richness to the Cwmheisian, Dolfrwynog, Cefn Coch, Prince of Wales, Cambrian, and Clogau. I am satisfied that the same cause exists in the production of gold in all these mines, although the lodes differ in point of matrix and mineral. By ignorance of these causes we may heedlessly pass the most valuable portions of the lodes, because there does not happen to be visible gold. I have often observed that certain blanks in gold lodes contain visible gold above and below. In driving levels we as frequently come upon a blank as upon a rich part of the lode, but if the causes which produce the gold be known there will be no difficulty in ascertaining whether no time should be lost in prosecuting above and below.

The geology of each of the districts where the mines are situated is accurately described in the Geological Survey, though it may be that the Lingula beds occur in one of the districts, and are omitted. I shall at all times be glad to give any information I can for the sake of all concerned, and I trust others will do the same, well knowing that there are many more practical and scientific than myself. I believe, too, that much advantage would result from all the mining captains in the neighbourhood being allowed to take a stroll over all the mines, the directors of all the adventures in the district first agreeing to grant "admittance to all mining captains in the district," and placarding the same. All would then be able to satisfy themselves upon the points alluded to. *Llanelltyd, Jan.* 13. —— THE FIRST GOLD WASHER IN WALES.

GOLD MINING IN WALES.

SIR,—I entirely differ from your correspondent, "A Looker-On," that the argument put forth by those who anticipate realising dividends from the development of the gold deposits in Wales is—"As quartz with mundic produces gold in California, and even in a few spots in Wales, why should not the same kind of substance produce gold everywhere?" So illogical an argument I am convinced no practical man would attempt to support; it is very much like Prof. Tennant's notion, that inasmuch as the Cornish miners call two substances by similar names, *therefore* they do not know one from the other.

The true, and I think tenable, argument upon which the Welsh gold seekers rely is this—As quartz containing on the average only 8 dwts. of gold to the ton has been worked profitably in Australia as to return large profits to the adventurers, therefore much larger profits may be looked for in Wales, where the average contents of the quartz from the poorest mine proposed to be worked for gold is 16 dwts. per ton, more especially as labour and materials are only about one-tenth the price in Wales that they are in Australia. From these facts it will be apparent that whatever amount of profit may be obtainable in Australia, precisely 16 times that amount will be obtainable in Wales, for if a given sum return a given profit in Australia, one-eighth of that sum will return twice that profit.

I do not think, however, that adventurers should look for immediate returns, because all who have had any acquaintance with the extraction of metals from their ores by chemical processes (and gold and silver are never extracted by any other means) know that almost every class of ore requires a different system of treatment. For this reason adventurers should anticipate delay, which they can well afford to do, with the prospect before them that ultimately their profits will be sixteen times greater than those of the Port Phillip Company, in which, as well as in several of the Welsh gold mines, I am a shareholder.—*Jan.* 14. J. C. R.

TREATMENT OF GOLD QUARTZ.

SIR,—The gist of Mr. Cottingham's letters of Dec. 27 and Jan. 3 is—1. That his friends and himself believe that mechanical means can be applied in aid of stamps or other crushing power, by which the disintegration of the quartz to the requisite degree of fineness can be effected more speedily, economically, and efficiently, than by stamps, &c., alone.—2. That he or they can suggest improvements in delivering the entire bulk of pulverised quartz to, and in passing the same through a mercurial receiver, with less than the ordinary loss of gold and mercury, whatever the quality of the quartz may be.—3. That "their process has been fully and fairly tried, and found quite successful."

It is probable that useful application of some of their suggestions can be made in certain, if not in general cases; the field is large, and the memorable words of Newton, gracefully quoted in last week's Journal on another subject by Mr. William Reay, jun. (himself, by-the-bye, "a deserved authority" on gold ores and their treatment), should preclude any idea of jealousy between parties really desirous of success. Mr. Cottingham's observations, however, prove that he has only yet had a limited sphere afforded him for "observation and experience" on this question (deserving, as I am assured, himself and his friend are). He publicly ignores the capability of stamps; and the fact that some thousands of tons of gold quartz are pulverised with such power successfully every week. He does not tell us if his trials have been made on 5, 10, 50, 100, or 1000 tons of quartz, or "its qualities;" or furnish a result of the content in bulk on a fair sample, or that yielded from the amalgam, or of the wear and tear of his improved machinery, &c., "after treating bulk continuously;" whilst it is certain there did not exist in England six months ago any really suitable machinery erected, and an establishment for the treatment of gold quartz on a large scale, at which any parties who have not had experience on bulk could become entitled to a degree of "M. A." in the science; and it is equally certain that consigners of gold quartz from any part of the world to Britain could not six months ago, if "now," find any convenient place ready for its treatment in bulk, because the business in England is entirely new. May it not, therefore, be possible that what is new "here" on this subject may not be so elsewhere? REVIEWER.

REDUCTION OF GOLD QUARTZ.

SIR,—I see another anonymous correspondent, "Looker-On," communicates the important information that the remarks of first anonymous, "Observer," on my letter in the Journal of Dec. 20, are in accordance with the opinions of practical men. This is rich, truly. It is very amusing to see the knack some people have of misunderstanding what others write when it does not agree with their own views. I wrote nothing about "obstacles *in* realising returns," or about "quality or quantity of quartz or raw material." I wrote about a *proved process of reduction only*; but I know, and so do many more, to their sorrow, and so ought "Looker-On," if he be a practical man, that the mode of reduction and extraction has *all* to do with realising profitable returns from gold quartz, or any other auriferous material. If you have quartz containing 18 dwts. per ton, and A extracts only 13, and B 17, or even all, which of the two is most likely to return profits? I wrote nothing about "mundic," or the "gold-bearing relation of Australia or California to Wales." I am as glad as anyone to see mining enterprise legitimately and vigorously carried on; and I do hope that, for the good of Dolgelly, for the credit of English enterprise, and for the credit of the utopian gold-extractors, who are about to operate on Welsh aurifera, large profits will accrue to those who have recently invested their capital in Merionethshire, and that 1864-5 will not prove as mortal as 1849-51 in respect to the gold fever.—*Mold, Jan.* 12. THOS. L. COTTINGHAM.

EXTRACTION OF COPPER FROM POOR ORES.

SIR,—In reading over Mr. G. Henwood's remarks on the Alderley Edge Mines, in last week's Journal, I notice he must have misunderstood me regarding Mr. Henderson's not having patented the process for extracting copper from poor ores, as in use at these mines, as it is well known that he (Mr. Henderson) has patented the process in all its details. Whether Mr. Henwood or any other person can work the ores raised from Gourock or any other mine by the same process, without paying Mr. Henderson a royalty on the copper produced, is a question with which I have nothing whatever to do.—*Alderley Edge, near Manchester, Jan.* 13. JONATHAN DOWN.

JOINT-STOCK COMPANY PROSPECTUSES.

SIR,—It would seem that I am the only newspaper correspondent who ventures to analyse any of the numerous companies which claim the attention of the public before they have succeeded in completing their share lists. I regret this exceedingly, because it is very likely that the time I can conveniently apply to such investigations is inadequate to the detection of every case that ought to be examined; yet this will not prevent me from doing the best I can in the way of caution or reproof. At present I confine myself to a couple of instances, in the immediate results of which there is a little contrast.

THE INNS OF COURT HOTEL COMPANY (LIMITED).

36, Cannon-street, E.C., Jan. 10.

SIR,—Referring to, and agreeably with, your prospectus, I request the favour of your informing me—First, what amount, out of the proposed capital, in money or shares, or both, will be required to pay for the freehold of the George and Blue Boar Inn, and the other property mentioned? secondly, what is the estimated cost of taking down the present buildings and erecting the proposed hotel? Anticipating the courtesy of your early attention, J. LEE STEVENS.

To that letter I received a courteous reply from Mr. Thomas Waite, informing me "that the architect's estimate for the present buildings and land, together with the cost of erecting the new buildings, will be something like 70,000*l.*," which sum, as far as I can judge, will leave a fair margin, the intended capital also considered, to carry out the objects of the company; and, therefore, the omission of the architect's estimate in the prospectus could not have been intended to mislead anyone, whilst its insertion would have materially strengthened the appeal made by that company to the confidence and support of the public in connection with its general merits.

CANNES HOTEL COMPANY (LIMITED).

36, Cannon-street, E.C., Jan. 10.

SIR,—In the interest of investors I shall feel obliged by replies to the following queries, relative to the prospectus of your company:—First, if you issue "scrip or shares to bearer," which are *unregistered* shares, how can you comply with sections 25 and 26 of "*the Companies Act*, 1862," which are essential to the constitution of a company under limited liability? I apprehend that no provision in the Articles of Association can override the Act under which they are registered. Secondly, Are the "six English acres" constituting the proposed site freehold or leasehold, and what are the terms of purchase? Mr. Alfred Elborough, Sec. J. LEE STEVENS.

Cannes Hotel Company (Limited), 9, Austinfriars, E.C., Jan. 13.

SIR,—I beg to acknowledge the receipt of your letter of the 10th, in which you enquire, in the interest of investors—First, how this company can comply with sections 25 and 26 of the Companies Act, 1862, if we issue scrip or shares to bearer, which are unregistered? and, secondly, whether the six English acres constituting the proposed site are freehold or leasehold, and what are the terms of purchase? In reply, I beg to say that if the investors to whom you refer will have the goodness to apply to me direct I shall be happy to afford them all necessary information. You will readily understand that I adopt this course in order not to afford any pretext for a claim upon the company for professional "promotion." A. ELBOROUGH, Sec.

J. Lee Stevens, Esq., Promoter of Joint-Stock Companies, &c., &c., &c.

You will observe the peculiar style in which the preceding letter was addressed to me by Mr. Alfred Elborough, probably with the view of making it coherent with the last paragraph of his long-considered lucubration. There was no indication whatever in or on my communication to him that could call for his so addressing me. I rejoined as follows:—

36, Cannon-street, E.C., Jan. 14.

SIR,—I am this morning in receipt of your answer to the letter placed in your hands early on Saturday last, and considering the time occupied in its concoction, and the nature of its contents, I am precluded from congratulating you on anything approaching official aptitude, unless, indeed, I accept your communication as an illustration of the "circumlocution" style, so admirably described by Dickens as "*how not to do it.*" You represent a company asking the public to subscribe 120,000*l.*, upon a prospectus, the legality of which is doubted, and which does not give the holding or the valuation of the property proposed to be purchased; and you decline to give me information, under the simulated pretence that it might afford me "a claim upon the company for professional 'promotion.'" Such an assumption, on your part, would be silly and absurd, if it were not intended to be insolent. You are no novice in these affairs. You know perfectly well that under no possible circumstance could I have any claim whatever to participate in the "promotion" fund of your company; and I must add, that in the absence of conviction, upon competent authority, of the *legality* of your prospectus, no payment of any kind or amount, as "promotion" money or otherwise, would induce me to be the "promoter" of such a constituted company, or to "promote" the disposal of its shares. J. LEE STEVENS.

A. Elborough, Esq., Sec.

The personal episode being referred to only as an unsuccessful means adopted to stifle enquiry, I think the public, without exception, is entitled to know the process by which the Cannes Hotel Company can be sustained in its assumption of "limited liability," although professing to issue what Mr. Alfred Elborough (in addition to the prospectus) describes as "scrip or shares to bearer, which are unregistered;" and I believe, also, that it would be better to keep the prospectus of every company strictly within the known and generally admitted limits of the law, than to run the remotest risk of rendering its subscribers liable to the consequences of any legal uncertainties; nor am I at all doubtful of the propriety of a public avowal by or for the directors of the Cannes Hotel Company Limited (?) of distinctly describing the property they have bought, and "the terms of the purchase."—*London, Jan.* 15. J. LEE STEVENS.

SCOTCH GRANITE.—A new Scotch granite of fine quality and appearance, and very cheap, will shortly, it is anticipated, find its way into the London and other markets. The granite alluded to is that from the Kirkconnell Quarry, on the Nith, about six miles from Dumfries, which is situated on the estate of Mr. Maxwell Witham. The Kirkconnell Quarry is within 400 yards of Aird's Point, a mile below Glencaple, on the opposite side of the river, and about the same distance from the village of Newabbey. The rock lies both in beds and perpendicular posts, from which blocks large enough for any purpose can be got. There is very little soil on the rock, indeed a good portion of it is bare. The rock extends in the form of a ridge over the hill for a mile in length, varying from 40 to 80 yards in breadth, and from 26 to 46 ft. perpendicular. The proprietor intends to construct a tramway to Aird's Point, facing the Carse, 400 yards in length, so as to convey the stone direct from the quarry to a jetty proposed to be constructed at or near to Aird's Point, and where vessels could be commodiously loaded and dispatched to the leading ports of the kingdom, where an extensive demand exists for good granite. The rates of freight, compared with those paid for the Aberdeen and other stones, are very moderate—to Glasgow, 5*s.* to 6*s.* per ton; to Liverpool, 4*s.* to 5*s.*; and to Dublin and Belfast, 4*s.* to 5*s.* There will be no cartage to the vessels. The grant has been favourably reported upon by Mr. D. Stevenson, of Edinburgh, and by Mr. Scott, Inspector of works to an extensive contractor at Peterhead. Negociations are pending for a lease of the quarry, and it is not improbable that the Nith Commissioners will be disposed to encourage a tenant by erecting a suitable jetty at or near to Aird's Point, as soon as assured that the quarry will be opened and wrought. Indeed, the working of the quarry will be a source of considerable revenue to the Nith Navigation Commission. Prof. Harkness, of Cork University, is stated to have remarked in a recent lecture at the Dumfries Mechanics' institute, "On the Geology of Scotland," that the granite which had been found there was equal in quality to any in the world, and that it was the most southern deposit of granite he knew of. The Dumfries granite has the advantage of being much nearer Liverpool than the Mull of Ross Quarries, or the Inverary Quarries.

ASPHALTUM OIL.—Mr. Dollfus has discovered that the heavy oil extracted from the asphaltum and bitumen of Pechelbronn is the best and most economic substance for preventing the incrustation of steam-boilers. A thin coating of the oil is painted over the interior of the boiler every time the boiler is cleaned. By this means incrustation is entirely prevented, less fuel is required to keep up the steam, and the boilers do not burn out so fast.

The Viscount de Vougy, the director-general of the electric telegraph throughout France, has invited several scientific members of the National Institute, and some of the chief clerks in the telegraph department to assist at experiments about to be made with the typo-telegraph, invented by the Chevalier Bonelli. The typo-telegraph of this scientific engineer can print 500 despatches of 25 words within an hour. According to the system of Morse, now in use, it would require not less than 20 wires and 80 clerks to accomplish a similar work. Should the experiments prove satisfactory, it is said that the Government will concede to the Chevalier Bonelli the working of the line from Paris to Lyons and Marseilles.

Meetings of Mining Companies.

NORTH ROSKEAR MINING COMPANY.

As this extensive and well-organised property has of late attracted an increased amount of public attention, a few facts in connection with its history and position may not be without interest to those who have but recently become shareholders. In the first place, it may be mentioned that this mine is situated to the north of Dolcoath, and to the south of Wheal Seton, adjoining both of those far-famed mineral properties. In its eastern part it embraces a run on the course of the productive lode (Reeve's) in Seton, of about 150 fathoms, extending from North Crofty to Seton boundary, while upon the main, or North Roskear lode, running from North Crofty, on the east, to the western boundary (Crane Lane), the sett extends for nearly 1¼ mile—from this portion of the mine the main portion of the profits have as yet been derived. Prior to the operations of the present company, the eastern, or Crofty, portion of the sett was to some extent developed, dividing among its then proprietors a profit of something like 45,000*l.*, at 1-6th royalty.

The present company commenced operations in 1815, and in 1817 Capt. Joseph Vivian accepted the management, in whose efficient hands the affairs of the company have continued from that time to the present—a period of 45 years, during which mineral of the value of no less than 1,000,000*l.* sterling has been returned, and profits to the amount of 100,000*l.* have been divided among the proprietors. More than 20 miles of levels have been driven, chiefly through hard blast-rock; but, notwithstanding the great expense incurred in prosecuting such operations, the beds of ore have been of such a productive character as to leave the very large profit just mentioned. There yet remains an immense quantity of unexplored ground upon the main lode, as well as upon the several side lodes, more particularly upon Reeve's, which passes through North Crofty, North Roskear, Wheal Seton, and West Seton. The deepest western point to which this celebrated lode has been explored in North Roskear is 160 fathoms below adit, at which depth (as will be seen by Capt. Vivian's report) this lode is beginning to assume a more productive character than at the levels above. It may, therefore, be reasonably calculated that important results will be achieved by the extension of this level, inasmuch as in Dolcoath and the other mines in this valuable mineral district the richest courses of tin have been met with at deeper levels than any yet reached in North Roskear. It may, perhaps, be mentioned that at the present time a great heat is proceeding from the 140 fm. level, on Reeve's lode, near the boundary between this mine and North Crofty; and it is thought by those best able to judge that by the extension of the 160 fathom level towards that point a discovery of copper will be made, it having been found in some of the most important mines in Cornwall that the following of such an indication as that just stated has led to the most important and valuable discoveries. The copper, from which the past profits have been derived, became to a great extent exhausted some ten years since, and since that period the explorations have been carried on with the view of meeting with another deposit of copper at deeper levels. Fortunately, this has been recently met with at Pearce's shaft, in the 174 and 184, where a course of ore has been driven through for about 25 fms., averaging from 50*l.* to 100*l.* per fathom, and appearing to increase in value rather than otherwise as the operations are extended in the last-named level. The 194 is being driven towards this point, and an opinion is generally entertained that the value of this discovery will be materially enhanced by the extension of this and the other deep levels.

At the general meeting of shareholders, held on the mine, on Tuesday, a large number of shareholders were present. Among others may be mentioned—Messrs. G. Batters, W. C. Vivian, J. B. Brenchley, and T. P. Thomas, of London. The local shareholders were represented by Capt. Bickford; Mr. Edwards, of Helston; Messrs. F. Pryor and Little, Redruth; Mr. Dawes, Devonport; Messrs. Petherick (Petherick and Holman) and A. E. Paull, Camborne; Mr. Harvey, Hayle; Mr. Jennings, Wheal Seton; Mr. J. Thompson, superintendent of the Pendarves estate; Mr. Lanyon, mineral agent of Mr. Basset; Mr. R. Hawke, of Liskeard, &c., &c.

Mr. Thomas Field, jun. (the purser), occupied the chair.

The notice convening the meeting was read, and the minutes of the last meeting were confirmed.

A statement of accounts was submitted, which showed that the mine expenditure for the months of October and November, including a debit balance from last account of 23*l.* 8s., had amounted to 2896*l.* 11s. 4d., and that the total receipts had been 3169*l.* 3s. 2d., thus leaving upon the two months' working a profit of 182*l.* 7s. 10d. As in these two months' accounts there was included 90*l.* for 12 months' interest to bankers (who made up their books but once in twelve months), and a debit balance of 83*l.*, the actual profit upon the two months' operations may fairly be stated to have been more than 300*l.*

The Chairman, referring to the financial position of the company, stated that in the accounts just submitted every known liability had been charged. They had a stock of coals on hand which would last them at least to May, and possibly to June; and the amount charged for coals during the past two months exceeded by 40*l.* the value of the quantity consumed, by which means their coal account was kept in a sound position. He might state that it was the opinion of some shareholders that they should strike off an old subsist account, amounting to 1054*l.* 8s. 1d., which had hitherto been regarded as an asset, when there would be a balance against the company of 872*l.* 2s. 3d.

Mr. G. Batters enquired the length of time that amount had been owing?

The Chairman replied that some of it had been owing for 20 years, but that more of it had accumulated during his pursership.

Capt. Bickford said the matter was easily understood—the men were paid certain moneys upon subsist, and when repaid they were not credited—that is, they were not entered as paid in the mine manager's book, although credited to the adventurers in the cost-book; but nearly the whole of the amount was paid.

Mr. Batters was glad to hear that the mine had not lost the amount. There had been a great deal of discussion upon this question, and he was strongly of opinion that it should be expunged from the company's books, and a call made to pay off the amount.

The Chairman quite agreed with Mr. Batters, for the amount could in no way be considered an available asset.

Capt. Joseph Vivian (the manager) then read the following report:—

Jan. 13.—Western District: Copper Department: In the 194 fm. level, west of Prince William Henry shaft, the lode is 1½ foot wide, sparry, and producing good stones of ore and very near the cross-course, to the west of which an improvement took place in the lode at the level above. In the 184 fm. level, now about 9 feet west of Pearce's shaft, the lode is over 3 feet wide, and worth about 50*l.* per fathom. In a winze sinking under this level, about 10 fms. east of Pearce's shaft, the lode is 6 feet wide, and worth 75*l.* per fathom. In the stopes in the back of the 184, east of the same shaft, the lode is worth 50*l.* per fathom. In the bottom of Pearce's shaft, at the 184 fathom level, the lode is worth 65*l.* per fathom. We calculate on commencing to sink this shaft in from five to six weeks from this time. In a winze sinking under the 174 fm. level, about 11 fms. west of the said shaft, the lode is 4 feet wide, and worth 75*l.* per fathom. In the 174 fm. level, west of the same, the lode is 5 feet wide, composed principally of spar, impregnated with copper ore and mundic—a kindly lode. In the 164 and 152 fm. levels the lode is at present small, but producing a little copper. In the 140, west of the same, the lode is about 2 feet wide, kindly in appearance, and producing good stones of ore. In the 130 fathom level, west of the same, the lode is 4 feet wide, very sparry, and producing stones of copper and tin ores. In the 90 fathom level, west of Darke's shaft, the lode is 3 feet wide, and producing occasional stones of copper ore.—Wheal Crofty, or Eastern District: Tin Department: We have cleared the 160 fathom level, and have driven about 9 feet east of the cross-cut, on Reeve's lode, and find it about 8 feet wide, at present a little disordered by a small cross-course, but producing good stones of tin, and looking likely to improve. The same level has been driven about 45 fathoms west of cross-cut, through a very large tin lode, but as the air is bad, and the end very hot, we have thought it wise not to commence operations here till we have got a winze through from the level above. In a winze sinking under the 140, about 5 fathoms behind the 160 end, the part of the lode we are carrying is about 8 feet wide, and worth about 20*l.* per fathom. In the 140 west the lode has improved in appearance, and is now worth from 15*l.* to 20*l.* per fathom for tin and copper, and looks likely for further improvement. The tin stopes are without alteration to notice. We calculate that our credit for the next meeting will be about 3300*l.*, which will leave a profit.—J. Vivian, R. Argove, F. Hosking.

Mr. Batters thought it could not fail to be exceedingly gratifying to all interested in this undertaking to find that the past two months' operations had resulted in a profit, inasmuch as during the previous two months there had been a loss of something like 700*l.* They might fairly calculate, therefore, that the mine during the past two months had improved its returns by 1000*l.*, as compared with the returns of the corresponding period immediately preceding. He would suggest that a call of 30s. per share should be made, which would not only liquidate the debit balance created by the subsist account already referred to but it would leave something like 200*l.* to the credit of the company.

Capt. Bickford thought it would be better to make the call only of such an amount as would liquidate the present liability, because if the call exceeded that amount there might be some legal difficulty in enforcing its payment. Not that he for one moment apprehended any such difficulty would arise under their present favourable circumstances, but he thought it better to adhere to the old system. As a call of 25s. would produce about 3*l.* more than their liability, he would suggest that a call of that amount should be made.

Mr. Batters was only anxious, for his own sake as well as that of his friends, to stop the mouths of their adversaries. He saw it stated in last week's *Mining Journal* that the loss during the past two months had been 700*l.*; and, therefore, if a call of the amount suggested by Capt. Bickford would liquidate the whole of the liabilities, he would gladly support the suggestion.

Mr. F. Pryor thought it would be better to state that the division of costs amounted to 25s. per share, which proposition was put and carried unanimously.

Mr. Batters said that as during the past six months a great number of his personal friends had become shareholders in this property, he should like to elicit some information from their worthy manager upon two or three important points. For instance, some few weeks since he (Mr. Batters) had made a statement to the effect that the length of the North Roskear sett was equal to Wheal Seton, West Seton, and New Wheal Seton put together. As that statement had been called into question, he should like to ask Capt. Vivian whether North Roskear was not longer than the three setts to which he had referred?—Capt. Vivian replied that, without the Wheal Crofty portion, their sett was longer than Wheal Seton, West Seton, and New Wheal Seton, and Wheal Crofty was also on the course of the lode.

Mr. Batters, seeing that there was a considerable extent of property unexplored in the western portion of the sett, suggested the propriety of dividing their extreme western ground, so that it might be developed by a new company. If, for instance, an engine was put up (say) 250 fms. west of Pearce's shaft, it would greatly relieve North Roskear, and remove the necessity for the erection of a steam-engine for the development of the copper discoveries at the western part of the mine. He had had a conversation with their manager upon this question, and it appeared that if it were thought desirable an extension of ground westward could be secured—all of which was intersected by the productive lodes of North Roskear proper. If such an arrangement were carried out, he must confess that he was at a loss to conceive any reason why the shares should not be equally as valuable as those of New Wheal Seton. At any rate, he would suggest that at the next meeting the subject should be brought forward for discussion. The condition he would propose would be that the new company should be divided into 700 shares, so that each shareholder in North Roskear would receive his *pro rata* interest in the other company.

Capt. J. Vivian said if the sett were divided, the parties taking up the new or unexplored portion must, of course, be prepared to make some small outlay. He had spoken to Mr. Basset's agent about an extension of the ground westward; and he (Capt. Vivian) could inform the adventurers that the ground required could be obtained, but Mr. Basset would, in the first place, like to know in what way the parties would explore the ground so granted. Before deciding upon where the division should be made, he should like to go over the sett with some of the largest shareholders, and point out the direction of each lode.

Capt. Bickford, a large shareholder, fully agreed with Mr. Batters that it was desirable to divide the sett upon the terms stated, and suggested that as the name of their present mine "Roskear," was an old Cornish term, meaning a lovely valley, the new sett should be called "Roskearnoweth," which would mean a new lovely valley,—"noweth" being old Cornish for new.

Capt. Vivian (in answer to questions) stated that the Wheal Seton lode came into the North Roskear sett again to the west, and in the portion that would be included in the new sett that lode could be explored to any depth.

Mr. Batters enquired when their manager hoped to commence paying dividends?

Capt. Vivian had no doubt that at the meeting after next a dividend would be declared. (Hear, hear.)

It was agreed that the following should be entered in the cost-book:—"Notice was given by Mr. Batters that at the next meeting of shareholders a proposition would be brought forward to divide the ground somewhere west of Enys' shaft, and form a new mine, to be called 'Roskearnoweth,' and to embrace some ground further west and south; the mine to be divided into 700 shares, and allotted to the shareholders share for share."

Mr. Batters suggested that their purser's salary should be increased to the amount received by his predecessors. It was admitted on all hands that their present purser was the most attentive and efficient that they had ever had, and therefore it was surely but an act of justice that he should receive the same salary as that received by his predecessors—namely, nine guineas per month.

Mr. Little (of Redruth) said that when Mr. Field accepted the pursership it was never anticipated that the salary should be continued at the reduced amount.

Upon the proposition of Capt. Bickford, seconded by Mr. Little, a resolution was passed increasing the salary of the purser to nine guineas per month.

Mr. Field having acknowledged the compliment, the business of the meeting then terminated.

At the dinner, Mr. T. Field, jun. (the purser), occupied the chair, and Capt. J. Vivian the vice-chair. The usual toasts having been drunk,

Mr. Batters rose to propose what he considered to be the toast of the day. All around that table were, doubtless, aware that Mr. Robert Hunt had recently made some very severe and harsh remarks about the intelligence of the managers of mines in Cornwall, and the mining population generally, in a paper which that gentleman read before the Society of Arts. He (Mr. Batters) was very glad to see that those strictures had been fearlessly answered by Cornish managers and Cornish miners, and in a way that they deserved to be answered. Now, he (Mr. Batters) had had considerable experience with all grades of Cornishmen, and he would be bold enough to assert—and challenge contradiction—that the working miner was far, very far, above the average of any class of labourers in point of intelligence—in fact, the Cornish miner would bear comparison, in point of intelligence, with any body of English artizans. (Hear, hear.) Most of their mine managers, and some of the ablest engineers of the day, had risen from the ranks of the working Cornish miner—and in point of principle, and of everything that ought to be admired in man, the Cornish miner would bear favourable comparison with any other body of our countrymen. As to their Cornish managers, why some of them—of course, he did not refer to mere "bal" sellers—occupied a deservedly high position, and were recognised by all as men of skill, probity, and intelligence, and in whom the most implicit confidence could be placed. (Hear, hear.) Foremost in this enviable category stood their veteran manager, Captain Joseph Vivian—(hear, hear)—who had so economically and efficiently conducted the affairs of this extensive property for nearly half a century. Even the most uninitiated in mining could not pass through that sett without being struck with the fact that the whole of the details had been under the control of one who possessed a high order of engineering and scientific skill. All present were aware that during the long period of 45 years their worthy manager had devoted his mind and body in the promotion of the best interests of the shareholders in North Roskear; all were aware that during that period mineral had been returned to the value of 1,000,000*l.* sterling, and that 100,000*l.* had been divided among the shareholders—and all were aware that Capt. Joseph Vivian and Capt. C. Thomas stood forward as the leading mine managers in Cornwall, both of them having attained a deservedly high and unsullied reputation. He (Mr. Batters) had introduced a large number of his friends into this mine, all of whom, he was sure, felt absolute pleasure in being associated with such an undertaking, controlled by such an eminent manager. With the utmost possible pleasure he proposed "Long life, health, and prosperity to Capt. Joseph Vivian." The toast having been drunk with enthusiasm,

Capt. Joseph Vivian rose to respond. He said it was a very great source of pleasure to find that gentlemen who had come from a distance were satisfied that the Cornish mine manager was not quite so ignorant as some people connected with the Government School of Mines seemed to indicate. So far as he was concerned, he had endeavoured to do his best, and was proud to say he had given satisfaction. When he was appointed underground agent, North Roskear was condemned, but in the face of that condemnation he had always entertained an opinion that in depth a course of ore would be found. The results, known to all present, had proved the correctness of his views, for since then, profits to the amounts of 100,000*l.* had been divided among the adventurers. They had still a vast amount of mineral ground to explore—more, in fact, than double the amount that had yet been explored; and there certainly was no reason why it should not produce mineral equal in value to that already returned. In the eastern part of the mine, 160 fms. below adit, there was a lode, 18 or 20 ft. wide; beyond that level nothing had been done, although above it there were great courses of ore, and who, he would ask, could say that future development should not produce in North Roskear equal results to those realised in Dolcoath and Cook's Kitchen? He might mention that there was 50,000*l.* worth of ore discovered, but, of course, from that must be deducted the cost of raising it; but if the recent discovery continued, they would be able to declare a dividend at the meeting after next, unless they wished a large accumulation of profits to be left in the hands of the purser. He was glad they had decided upon clearing off the subsist account, and he could not help feeling that most of their work would soon be carried on at a profit. With regard to the proposed division of the sett, it struck him that the suggestion was a wise one, but it would be necessary to show the public that they were only parting with this portion of the sett simply because the present company would not be able to explore it for years to come; and they must also show that there was plenty of ore to be found in that ground. The fact was, that to the west there was an immense tract of unwrought ground, in which some of the lodes had not been broken even in the adit level, and as to the North Roskear lode, that had not yet been seen in the western sett. Mr. Basset's agent was quite disposed to grant all the ground which they required, if it were properly worked. Under all these circumstances, and taking everything into consideration, the mine generally was now looking far more favourable than it had done for some considerable time past, and he hoped they would go on and prosper for very many years. (Hear, hear.)

Mr. Edwards proposed the health of the purser in complimentary terms, which Mr. Field gracefully acknowledged.

Several other toasts having been drunk, the assemblage dispersed.

EAST ROSEWARNE MINING COMPANY.

A general meeting of proprietors was held at the offices, Austinfriars, on Wednesday, Mr. R. M'Callen in the chair.

Mr. E. King (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts for the four months, ending with costs for November, was submitted, from which the following is condensed:—

Calls received	£ 250	0	0
Copper ore sold	1718	19	11 = £1968 19 11
Balance last audit	£ 246	19	3
August mine cost, merchants' bills, &c.	452	9	2
September ditto	363	4	10
October ditto	420	4	6
November ditto	419	17	2 = 1902 14 11
Leaving debit balance			£ 66 5 0

The Chairman thought, before the meeting entered upon any discussion with regard to the working of the mine, that they had better consider and dispose of the accounts. He had to congratulate his co-proprietors upon the fact that there was now a balance upon the right side of the account.

A Shareholder having suggested that the meeting would the better understand what financial course should be adopted by the report of the agent being at once submitted.

The report of the agent was read, as follows:—

Jan. 13.—I beg to inform you that in the past four months we have sunk Hallett's shaft 4 fms., in a lode worth from 9*l.* to 12*l.* per fm.; this is now down to the 65; we have also divided the shaft, and have the kibble working to this level. In opening north at the bottom of the shaft, preparatory to driving the 65, we discovered a branch about 9 inches wide, worth 7*l.* per fm., which will apparently intersect the lode at the shaft in about 6 feet sinking, when we may reasonably expect a great improvement in the lode. The 65 has been driven east 9 ft.; here we are carrying both the branches referred to; the north part is about 10 in. wide, worth 9*l.* per fm.; the south 6 in. wide, producing a little ore, but not to value. The 65 west has been driven 9 feet; we are carrying both the branches here also; the north part is 8 in. wide, and the south 9 in. wide; they are worth conjointly 12*l.* per fm. The 55 east has been driven from the point of the horse on the north lode 7 fms. 4 ft., in a lode varying from 6 in. to 1 foot wide, producing good stones of ore; in the present end it is 6 in. wide, but not to value; we have driven on the south lode (or the branch south of the horse) 2 fms. 3 ft.; here the lode is small at present, but as it is in what in this mine and district is a productive bearing, I think there is a prospect of discovery. We are now cutting through the horse, which is about 9 ft. wide; when this is done we intend driving on the lode. We are preparing to sink a winze below the 55, east of Hallett's shaft, where the lode is 1 ft. 3 in. wide, worth 16*l.* per fm.; this is required to open the ground and ventilate the level below. The 55 west has been driven 17 fms. 4 feet, through a lode varying from 1 to 2 ft. in width, and in value from 15*l.* to 40*l.* per fm.; in the present end the lode is 15 in. wide, worth 32*l.* per fm.; the stopes over this level are worth 30*l.* per fm., average value; this is a good lode, with every indication of improvement in depth. We have sunk the western winze below the 43 fm. level 8 fathoms., in a lode from 6 to 9 in. wide, yielding occasionally little branches of good ore; in the last 3 ft. sinking the lode has greatly improved, now 1 ft. wide, worth 13*l.* per fm. We have driven the 43 cross-cut, south of King's, 10 fms. 2 ft., and from this, east on the engine-lode, 5 fms. 2 feet; lode from 1 to 2½ feet wide, composed of killas, mundic, iron, and occasion al stones of ore; I consider there is a good prospect of this improving as we approach the elvan course, it being now about 40 fms. west of it. The best of our ore ground is being stoped on tutwork, and we have five pitches on tribute, at tributes varying from 10s. to 13s. 4d. in 1*l.* I purpose in the coming four months to sink Hallett's shaft by eight men, drive the 65 east by four men, drive the 65 west by six men, drive the 55 east by four men, sink the 55, east winze, by four men, drive the 55 west by four men, sink the 43, west winze, by four men, till holed to the 55, then sink below this level by six men, and then drive the 43 east on the engine lode, by four men; also to stope on tutwork, or work on tribute, this available ground as may be advisable. In conclusion, I beg to repeat what I said four months since, that I consider the prospects of the mine are good; and it will be my endeavour to push on the various points of operation with all possible dispatch.—J. James.

The Chairman considered that the report of Capt. James, just read—which was, in fact, an elaborate statement of the whole of the operations at the mine—indicated that the prospects for the future were of the most encouraging character, for evidently their agent was impressed with the belief that by a continuation of the present operations the mine would in the course of the current year make considerable returns, with good results to the proprietors.

Mr. Lelean said that he had seen a report which fully bore out the statements made by Capt. James.

A Shareholder enquired if Mr. Lane had not recently received a report from the mine?—Mr. Lane said that he had received a report, which was of a very satisfactory character; but he did not consider himself at liberty to read it to the meeting.

A long discussion ensured with respect to the inspections of the mine, during which

The Secretary stated that a large number of orders had been sent for the inspection of the mine, and there was no doubt those various inspections proved a great hindrance to the working of the mine.

Mr. Lelean suggested that one day in each week should be set apart for the inspection of the mine.

Mr. Lane thought they could not do better than follow the course adopted in East Caradon, and set apart one day in each month for the purposes of inspection.

Mr. Libby considered that by adopting such a course shareholders would not be doing justice to themselves, and, therefore, he should support the suggestion made by Mr. Lelean—to have one day in each week.

The report and accounts were received and adopted, and a resolution was passed limiting the inspection to one day in the week.

The Secretary stated that he had received letters from several shareholders residing in the country complaining of the agent's reports which appeared in the *Mining Journal* being always dated from the Saturday previous to the day upon which that Journal was published. This they did not consider fair and equitable, and, therefore, he (Mr. King) would suggest that the day for their agent to report on the mine should be altered to Wednesday or Thursday, so that the report might appear in the *Mining Journal* upon the following Saturday.

After some discussion it was unanimously agreed that Capt. James should be requested to write his report on Thursday, to be received in London in time for insertion in the *Mining Journal*.

Mr. Libby, having purchased a large interest in this company, had recently visited the mine, and was very much pleased with the manner in which the whole of the details were carried out. He believed that in Capt. James the company had an invaluable servant, and that if satisfactory results could accrue from an effective management success would be attained in East Rosewarne.

Mr. Poole had examined the section, and found there was a large amount of unwrought ground. He wished to know if, by a continuation of the present value of the ends, the agent contemplated upon realising the same amount during the current four months that had been realised during the past two months?

The Secretary replied that the agent had not estimated in his report the returns for the current four months, but it must be borne in mind that in East Rosewarne the ground was easy—that the lode was not large, and that it fluctuated considerably; but he (Mr. King) saw no reason, if the present prospects continued, why the mine during the present four months should not make a return equal to that produced during the past two months; and it would be recollected that the 65 fm. level end had only just started from the shaft, and that, therefore, it was utterly impossible to give any correct estimate of what results would be realised from that part of the mine, although there was every reason to believe it would prove successful.

The committee of management were re-elected.

Votes of thanks to the Chairman and secretary were passed, when the proceedings terminated.

WHEAL KITTY (ST. AGNES) MINING COMPANY.

A general meeting of proprietors was held at the offices of the company, Austinfriars, on Tuesday,—Mr. Islip Odell in the chair.

Mr. E. King (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts for the three months ending October showed—

Tin sold	£2735	2	6			
Copper ditto	23	10	0			
Halvans	3	19	0			
Sundry credits	198	16	6 =	2961	8	0
Sept. mine cost, merchants' bills, &c.	763	11	6			
Oct. ditto	769	7	2			
Nov. ditto	827	14	1			
Incidental expenses	47	10	10 =	£2408	3	7
Leaving a profit upon the three months' operations of				£ 553	4	5

The statement of assets and liabilities showed a balance against the mine of 1024*l.*, 0s. 10d.

The report of the agents was read, as follows:—

Jan. 10.—We beg to hand you the following as our report of this mine:—Engine-shaft: The men in the 100, east of this shaft are engaged in driving south to cut the main part of the lode which is heaved in that direction by the slide; we expect to cut the same in about 2 fms. driving. The men in the rise are also driving south to cut the lode which is heaved by the same slide. The lode in the 90, east of ditto, is 18 in. wide, worth 6*l.* per fm., and improving in its appearance and character. The lode in No. 1 rise, in back of the 72, east of ditto, is 3 ft. wide, worth 12*l.* per fm. In No. 2 rise, in back of this level, the lode is 18 in. wide, worth 6*l.* per fm. We consider the chances of these rises to be good, and likely to open up some good tribute ground. Our tribute department in this part of the mine is not looking so well as of late.—Holgate's Shaft: The caunter lode in the 65 cross-cut south is 18 in. wide, worth 10*l.* per fathom. This has been driven within the past three months 13 fms. 5 ft. 4 in., and is now driving by six men, at 3*l.* 10s. per fm.; should its present underlie continue, and the ground remain as good, we expect to cut Pryor's lode in this level in about two months from this time; but should the caunter lode carry its head more to the west the cross-cut will be lengthened several fathoms.—Pryor's Lode: The lode in the 54, east of cross-cut, is 2 ft. wide, worth 8*l.* per fm. In this level, west of cross-cut, the lode is 2½ ft. wide, and worth 9*l.* per fm.; this end has for the last 6 ft. in driving been disordered by a gossan, which for the time has lessened its value; and, judging from its appearances, we think it will shortly improve; this level has been driven east and west of cross-cut about 41 fms., and for the whole of the distance in a good lode, which has told for itself by our returns. The lode in the 44, east of cross-cut, is 18 in. wide, worth 6*l.* per fm.; we consider this end to be near the cross-course. The lode in this level, west of ditto, is 18 in. wide, worth 10*l.* per fm.; this end is nearing a good lode, which was driven through in the level below. In No. 1 rise, in back of this level, east of cross-cut, the lode is 18 in. wide, worth 8*l.* per fm.; we hope to communicate this to the 34 within a month from this time, when a fine piece of ground will be opened, and good ventilation given. The lode in the 34, east of cross-cut, is 2 ft. wide, worth 15*l.* per fm.; and in this level, west of ditto, it is 20 in. wide, worth 7*l.* per fm., and improving. The 24 cross-cut is driven south of the old level about 17 fms., but the ground is rather spare for driving, and set to six men, at 7*l.* 5s. per fm. We have cleared and secured the 12, which was full of stuff from footway winze to the present end, a distance of about 50 fathoms. We have 78 men and boys on tutwork engaged in driving levels, sinking winzes, and putting up rises, who have during the past quarter laid open 100 fms. of ground, a great portion of which is on Pryor's lode, and in cross-cuts driving towards it, which, when reached in the 24 and 65, will, we believe, be found as good as in either of the three levels already opened on it, and enable us to maintain that steady progress in our returns which we have hitherto made. Of late we have laid out a good deal of money in repairing and altering our pitwork and machinery, which accounts for our cost and bills being so high. This will not occur again for some time, and will lead to a considerable saving in coals and lets.—R. Pryor, J. Nicholas, S. Davey.

The Chairman stated that it would be seen from the quarterly statement of accounts that there had been a profit upon the three months' working of 553*l.*—that had very materially reduced the balance against the mine. From the agent's report, he thought they were justified in thinking that their position and prospects were alike satisfactory.

The Secretary explained by a plan the position of Pryor's lode, and stated that the back of the 54 fathom level was being stoped, but that the rich run of ore in the 44 fathom level, worth 40*l.* per fathom, for 20 fathoms in length remained untouched. A rise had been put up to communicate with the 34, and when this communication was effected a large amount of reserved ground would be laid open, which would probably return dividends to the shareholders. In the 65 a cross-cut had been put out from the main lode, and a cross-course, or caunter lode, had been intersected, carrying a leader of tin of very rich quality. They had driven 6 or 7 fathoms upon this caunter, which had been worth upon an average 15*l.* per fathom, and the present end was worth 10*l.* per fathom. The agents estimated that if the ground continued of the same character as at present, the lode would be intersected in less than two months. In the 54 they had stiffer ground, and therefore it took longer to explore. It would be seen by the section the position of the proposed new shaft, and it was the opinion of the agents that this lode would make almost up to surface.

A Shareholder considered that the prospects of the mine were exceedingly encouraging. It was true the ends on Pryor's lode were not now quite so valuable as could be desired, but they could see that the 34 and 44 ends were coming into the rich run of ore which had been discovered in the levels below.

The Secretary said that something like 16 months since the returns from this property did not exceed 5 tons per month, but that for the last month the returns were more than 15 tons, showing that they were making a steady and satisfactory progress. They had been very liberally treated by the lords, for during the proverty of the mine they had come forward and relinquished the dues at pleasure. After a lengthened period, when the mine again became prosperous, the lords intimated that from the commencement of the year the dues would be resumed; such liberality, he thought, should be recognised and appreciated.

Mr. W. Poole thought, from the statement made by their secretary, as well as from the agents' report, that shareholders would be convinced they had a progressive property in Wheal Kitty, and, from the reports of those who had recently inspected the mine, there was good reason to hope that the returns would soon be doubled. There could be no doubt that there was an immense amount of reserve ground, and that the present manager was working the mine with the utmost economy, and promoting to the utmost the interests of every one concerned.

Mr. King, in answer to a question, stated that the average price of tin some months since was 75*l.* per ton, about 10*l.* above the present price. If that price had been realised upon the 45 tons of tin sold during the quarter the balance against the mine would have been nearly liquidated.—The report and accounts were received and adopted.

Votes of thanks to the Chairman and secretary were passed, which terminated the proceedings.

NORTH DOWNS MINING COMPANY.

A general meeting of proprietors was held at the company's offices, Broad-street-buildings, on Jan. 9,—Mr. R. Hallett in the chair.

Mr. Dunsford (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts for the four months ending October showed a loss of 468*l.* 18s. 3d. The assets exceeded the liabilities by 110*l.* 9s. 7d. The report of the agent was read, an abstract of which appeared in last week's Journal.

The Chairman having moved the adoption of the report and accounts,

Mr. Harrison enquired if the committee contemplate making a call?—The Chairman replied that there would be no necessity for a call for the next four months' operations, and during that period there were great chances of the mine considerably improving.

A Shareholder said, if the mine did not do inferior during the next four months to what it had done during the past four months, even if at the next meeting the committee deemed it necessary to make a call it would be of a very small amount—or, in other words, 6000 shares would have to provide 500*l.* But they had good reason to hope that the results of the next four months' operations would be more satisfactory than those realised during the past four months.

The Chairman said that the concluding paragraph of the agent's report could not but be considered encouraging—that "our chances of discovery are great, and I (Capt. F. Pryor) believe the mine will soon be in as good a position as it ever has been."

Mr. Peter Watson wished to know if it was their managers firm opinion that there was no portion of the lode left standing, &c. He asked that question because there seemed to be a feeling that the main part of the lode was still standing—he referred, of course, to the 60 east.

The Chairman need not remind the meeting that their manager (Capt. Pryor) was a great advocate of cross-cuts; and he (the Chairman) knew that two or three cross-cuts had been put at the 60.

The Chairman said that sump-winzes had been sunk, in which the ore had failed.

Mr. Peter Watson remembered a similar case in Old Kelly Bray, where the lode was found standing within a few feet of the working, and which gave 50,000*l.*

The Chairman, in answer to a question, stated that the next sales of ore would be better—it would be about the same quantity, but of an improved quality.

Mr. Harrison would like to know how far the cross-cut had to be extended to cut the North Treskerby lode?—The Chairman said it was known exactly where the North Treskerby lode was, and, therefore, it was impossible to say how far the cross-cut would have to be extended. The lodes were "heaved" in different places. Their manager would not give an opinion, from the peculiar underlie of the ground, as to how far the cross-cut would have to be extended, but the lode might be cut within a few days.

Mr. Peter Watson enquired if the party who had offered to purchase the Peever portion of the sett for 6000*l.* was still of the same opinion? Because if such were the case it would be a question for the shareholders to decide whether it should not be accepted

The CHAIRMAN thought they had better get a tangible offer before they talked about accepting it.

The SECRETARY said, at the time it was contemplated to sell Peever a special general meeting was called, for the purpose of deciding the question, when it was negatived without a dissentient, it being agreed that it should not be severed.

Mr. HARRISON enquired what loss had resulted during the past four months from working the Peever portion of the sett?—The SECRETARY thought the loss might be estimated at about 40*l.* per month. Referring to the sett generally, he might mention there was a considerable quantity of ground being opened—in fact, there were 64 men employed in opening the ground; there were 10 ends being driven, and three cross-cuts extended.

A SHAREHOLDER stated that he recently had the mine inspected, and the report which he received stated that unless some discoveries were shortly made a call must be made.

Mr. HARRISON suggested that what Mr. Peter Watson had pointed out should be communicated to the manager.

The SECRETARY said that he would communicate it to their manager, for the extending of the cross-cut a little further was only the question of a few pounds.

The report and accounts having been received and adopted,

A vote of thanks to the Chairman was passed, which terminated the proceedings.

COLONIAL BANK.

The fiftieth half-yearly general meeting of proprietors was held at the London Tavern, Bishopsgate, on Jan. 7,

Mr. C. MARRYAT in the chair.

Mr. C. A. CALVERT (the secretary) read the notice convening the meeting and the directors' report, which stated that the subjoined statement of accounts was submitted, in accordance with the Charter of the Corporation:—

ASSETS.				
Specie	£ 266,482	16	8	
Due to the bank in the colonies, on bills discounted and purchased, including those past due, &c. ..	1,014,354	13	10	
Due to the bank in the colonies on current accounts	7,129	17	7	
Due to the bank in London on bills remitted, cash at bankers, &c.	1,209,163	16	4	
Bank premises and furniture, in London and the colonies	9,623	14	8	= £2,506,754 19 1
DEBTS.				
Circulation	£ 282,083	11	8	
Deposits, bills payable, and other liabilities	1,578,482	5	9	
Paid-up capital	500,000	0	0	
Reserved fund	109,195	18	9	
Nett profit	36,993	2	11	= £2,506,754 19 1

In consequence of the depressed condition of the colonial produce market, and of the continuance of the civil war in the United States, the directors had considered it proper to instruct the local managers to be extremely cautious in their operations. The profit now reported showed but a small diminution compared with the previous half-year, whilst it was slightly in excess of the corresponding period of 1861. As the causes of the restrictions referred to in the last report continued in operation, the same caution was still exercised. It was proposed that out of the profit of 36,993*l.* 2s. 11d. realised, there should be a dividend of 6 per cent. for the half-year ending June 30, 1862, being at the rate of 12 per cent. per annum. This would leave 6933*l.* 2s. 11d. to be added to the reserve fund, which would, after that addition, amount to 116,189*l.* 1s. 8d.

The CHAIRMAN, in moving the adoption of the report, remarked that, as the proprietors had heard from the report, the cautions which had been sent out to the managers in the colonies had had but a very slight effect in diminishing their business. The accounts were more favourable than the directors anticipated, but he thought with reference to the necessity for restricting the managers in the colonies that it was a proper step; he regretted that they could not tell them anything more favourable. There was the same depression as to West India produce as when they presented their last report; sugar was following the same course as cotton, of which 80 per cent. comes from one country whilst the rest of the world supplies only 20 per cent. Sugar appears to be about the same—255,000 tons was the annual consumption previous to the consumption of slave sugar. The present annual consumption was 447,000 tons, showing an increase of 192,000 tons; of this, however, 146,400 tons was the result of slave labour, so that only 46,000 tons of the increase has been upon the produce of free labour.

A SHAREHOLDER enquired whether and in what way the London and Colonial Company was likely to affect them?—The CHAIRMAN was not aware that the company alluded to had announced its intention to commence business in the West Indies. Its operations were, he believed, confined to Canada.

Dr. BEATTIE asked whether the importation of coolies had not increased the production? It was his impression that when coolies could be used for labourers the produce could be obtained as cheaply as by slave labour?—The CHAIRMAN said that the production of sugar in the West Indies had increased, and that in the East Indies it had decreased; it had followed cotton exactly. The fact was that neither the East nor the West Indies could compete with slave-grown cotton or sugar.

Dr. BEATTIE maintained that cotton could be obtained from India in any quantity, and the circumstance that it had not been so obtained arose from the fact that India had been too much neglected by the consumers in this country.

The reception and adoption of the report was then put and carried, and it was resolved that a dividend of 6 per cent. on the half-year, being at the rate of 12 per cent. per annum, be declared. Mr. Henry Bruce, Mr. Charles Cave, Mr. W. Davidson, Mr. J. Fletcher, and Mr. W. Burnley Hume, who retired from the direction by rotation, were re-elected, and Mr. Alex. Macgregor was re-appointed auditor. Mr. T. D. Hill was then elected a director in the room of Mr. McGarel, resigned, and Mr. R. A. Hankey was appointed to the vacant auditorship, in the room of Mr. T. D. Hill, elected a director.

Mr. J. A. HANKEY, in moving a vote of thanks to the Chairman and directors, coupling with it the name of Mr. McGarel, who had just retired, observed that the effect which the consumption of slave-grown sugar had had upon the West Indies could not be doubted, but it was to be hoped that, now that the United States flag does not cover slave labour, a better state of things would be inaugurated both in the West Indies and in the United States.—Mr. SCOTT seconded the motion.

Mr. HENRIQUE differed from Mr. Hankey, not in respect to the vote of thanks, but with regard to the effect of the United States disallowing the traffic in slaves. He would ask whether it was the opinion of the West Indians that their wrongs would cease upon the extinction of slavery in the United States? He thought not. If when the slave trade ceased the English people continued using slave sugar, no good would result so long as slave sugar was permitted to come into England. It was the same party who ruined the West Indies by the abolition of slavery who were now siding with the Confederate States, because they found that free labour could not compete with slave-grown cotton, and that their pockets were affected by the existing state of things. If slave sugar and slave cotton were prohibited, an improved condition of affairs would follow. We must not be content with the abolition of slavery in the Southern States, but must look to the produce of slave labour generally.

The vote of thanks was then put and carried unanimously.

Mr. MCGAREL thanked the proprietors for the honour they had done him in including his name in the vote. He said that, as he had been in connection with the bank for the whole 26 years of its existence, it was with some regret he separated himself from the board, but he felt that he should not be justified in retaining his seat unless he continued strictly to perform the duties. The 14 branches of the bank required constant attention, and twice a month there was a large amount of correspondence to read and reply to. The company had a secretary surpassed by none, and one who had ably done his duties during the whole existence of the bank; but he necessarily required the assistance of the board. He trusted that their present very satisfactory dividend of 12 per cent. would be long maintained, and he might tell them, so satisfied was he that it would be, that he had recently increased his interest in the bank. The proprietors would be surprised when he told them that in six months they had received remittances for upwards of 1,200,000*l.*, upon which there would not be a loss of 1000*l.* He believed they had a board surpassed by none, and they could not have one that put the bank to less expense.

Thanks were then voted to Mr. Calvert, the secretary, and to the managers in the colonies, which Mr. Calvert appropriately acknowledged on his own behalf, and stated that he would take great care that notice of it was transmitted to the managers.

The meeting then separated.

FOREIGN MINES.

CENTRAL AMERICAN.—Nov. 29: We are pleased to inform you that all our mining operations have progressed in a most satisfactory manner throughout the month, and the sampling has exceeded that of October by several tons; the average ley also of the different classes of ore has improved.—San Pantaleon: The shaftmen have been busily engaged cutting the new plat at San Felipe level, which they will complete in about another week, so that preparations will be at once made for sinking Cornubia engine-shaft 10 fms. deeper, when it will have attained the depth of the new deep adit, San Alfonso.—San Juan, or the 10 fm. level under Dolores: The end east from No. 2 cross-course has been driven by two men and a boy 4¼ varas, at $9 per vara, where the lode is 20 inches wide, and producing from 5 to 6 cwts. of good quality silver ore per fathom. The No. 4 winze sinking from this level, east of the cross-course, has been sunk by four men 9¼ varas, at $7 per vara; in this winze the lode is large, being 4 ft. wide, composed of flookan and hard spar, which is mixed with blende and silver ore, worth of the latter about 4 cwts. per fathom, of fair quality. In No. 4 stope from the back of this level, on the eastern side of the cross-course, the lode is 2 feet wide, of calcareous spar with flookan, and is producing from 5 to 6 cwts. of good quality silver ore per fathom, with a very promising appearance. The lode in the adjoining stope, No. 5, from the back of the same level, has much improved during the month; it is now 3½ feet wide, and producing from 1 to 1¼ ton of rich silver ore per fathom. No alteration is observable in No. 6 stope, from the back of the same level, where the lode is still large, and producing about 4 cwts. of low quality silver ore per fathom.—San Ricardo, or the 20 fm. level under Dolores: The end east from No. 2 cross-course has been driven by six men 11 varas, at $10 per vara; in this distance we have passed through some nice bunches of rich ore, but the lode in the present end is rather small and disordered, caused by some branches of spar which have crossed the vein at different points. Four men have driven the same level going west from Cornubia engine-shaft 9 varas, at $9 per vara; we are sorry to say that the lode continues unproductive at this point. But little further has been done in No. 1 stope from the back of this level, east of No. 2 cross-course, where the lode is 20 inches wide, and worth from 5 to 6 cwts. of rich silver ore per fathom, with a very promising appearance.—San Felipe, or the 30 fm. level under Dolores: The end extending east from Cornubia engine-shaft has been driven by six men 11½ varas, at $6½ per vara; the lode in this frente is 2½ feet wide, chiefly composed of flookan and calc-spar, and has produced during the month a little good silver ore. The same level, west from Cornubia engine-shaft, has been driven by six men 8½ varas, at $6½ per vara. We are unable to speak of any improvement in the lode at this point, which is 20 inches wide, composed of quartz and iron pyrites, producing occasionally some rich stones of silver ore, and is still presenting an encouraging appearance.—San Alfonso Deep Adit: Six men have driven this end a further distance of 7¼ varas, at $25 per vara; the ground has been a little more favourable. The steam-engine, with all the other machinery, continue to work well, and with the large number of Indians which have been employed here for the last six or seven weeks we have managed to get in from the woods a good stock of fuel, the shed near the engine being two-thirds full of firewood. We are getting on with the building for the new engine, &c., as fast as circumstances will permit, the foundation for the engine-house has been got out, and the masons are now busily engaged about the outside loading, and from the fact of our having discovered a quarry of good stone near Cornubia shaft (which will greatly facilitate this work), we hope that in the course of two months more the house will be in order to receive the machinery. The building of the boilers is progressing very satisfactorily,—one of them is finished, and the other partly rivetted together.—San Antonio Mine: Six men have sunk Ellery's shaft 8½ varas, at $25 per vara. In this pozo the lode is now 2 ft. wide, chiefly composed of a rich gossan, mixed with a calcareous spar; large portions of this gossan are thickly impregnated with silver, and in the western end of the shaft, towards the bottom, there is to be seen a branch 4 in. in width, of almost solid silver-lead ore, which will produce from 6 to 7 cwts. per fm., of apparently good quality. This branch will, no doubt, make itself for the whole length of the pozo after a few feet more have been sunk; the ground at this point is more favourable for sinking than it has been, and the lode presents every indication of shortly becoming very remunerative. Four men have driven San Luis level, extending east from the cross-course 12 varas—3 varas at $10, and 9 varas at $8 per vara; in this end the lode is 4 feet wide, but as yet without ore of value. Six men have sunk the winze from this level near its entrance 9 varas, at $11 per vara; here the men have passed through a few good bunches of silver ore. At present, however, the lode in the bottom of the winze is rather small, being a mixture of gossan, mundic, and felspar, and containing a little good saving work. This pozo has attained its required depth (12 fms.)—San Luis: The lode in the underhand stope from this level, east from Maria's, or the innermost winze, and west from Ellery's shaft, is from 18 in. to 2 feet wide, and at present worth from 8 to 9 cwts. of good quality silver ore per fathom. In the stope from the back of this level, east of Ellery's shaft, the lode is 1 ft. wide, and producing about 4 cwts. of low quality broza per fathom.

GUATEMALA, Dec. 6:—I can refer with increased satisfaction to the total return of ores, which has amounted to 300 tons in five weeks, and as well to the large quantity transmitted to the hacienda, upwards of 261 tons. In the mine of San Pantaleon the ore ground maintains its state of productiveness. No. 5 stope demands particular note; here the lode has assumed a very rich appearance, and is now yielding from 1 ton to 25 cwts. of best ore per fathom. With the object of opening up stopes in the deeper levels, every exertion is being made to push forward the latter into the eastern ground. The report of San Antonio Mine is highly encouraging. At the bottom of the shaft the vein presents most flattering prospects. The working of the hacienda de San José has now assumed so regular a state throughout its various branches as to merit my entire satisfaction. The stock of ore on hand is gradually increasing; our stock of salt, too, is large, and with our mule freight charges reduced to a minimum, the cash payments for the ensuing two months will be comparatively small. We can, therefore, hope for an increased yield of silver, coupled with an economical rate of working; 34 bars of silver sent to Guatemala, of which 20 are delivered to the Mint, and 14 sent to England, value $10,988; 37 bags, weighing 2¼ tons, of furnace bottoms, assaying over 500 ozs. of silver per ton, also sent to England.—N.B. The 14 bars of silver and 37 bags of furnace bottoms have arrived by this packet.

ALTEN AND QUÆNANGEN MINES.—Estimated produce for Nov.:—

Mines.	Ore.		Per cent.		Copper.
Quænangen	Tons 40	.....	7	.....	2·800
Raipas	12	.....	5	.....	0·600
Old Mine	140	.....	4	.....	5·600
United Mines	15	.....	4	.....	0·600
Michell's	6	.....	5	.....	0·300
Quænvig	3	.....	4	.....	0·120
Total	Tons 216				10·020

Mining Report from Nov. 22 to Dec. 11.

QUÆNANGEN.—Lode E: The prospects in the 20 fm. level are less favourable than about a month since, several cross-heads having been met with, which have disordered the lode, and at present it only yields some saving work, irregularly intermixed. We have resumed driving the 10 west of Cole's shaft, where the lode is 2 ft. wide, composed of quartz and chlorite, with small portions of ore interspersed. In the stope above this level the lode yields about 2½ tons of ore per fathom, and looks kindly. In the deep adit east the lode is 1 foot wide, with a small leader of ore against the footwall; the ground is again rather hard. The tribute working on lode A continues to look kindly; the vein is about 2 ft. wide, well mixed with ore throughout, but, being without walls, is difficult to excavate. Baddern River lode still turns out good paying work, but it has somewhat decreased in size of late. The pitches throughout do not present any new feature calling for remark.

RAIPAS.—The 15 fm. foot stope is yielding rather better ore, and looks more promising than for some time past. In the same working, on the west side, a shoot of ore, of a very promising appearance, has recently been met with, which is worth 2 tons of good work per fathom. The barytes lode, above the 10, yields about 1½ ton of ore per fathom. No alteration worthy of notice has taken place in the levels since our last. The returns from here are again small; but if the improvement noted above holds good an increase will result therefrom.

OLD MINE.—Another small cross-course has been met with in the 10 south, which appears to have shifted the lode a little to the east. On opening in that direction, a branch, 10 in. wide, has been cut, which contains good stones of ore; but we are not yet certain if it is the main lode, or only a portion of it. In the 10 fm. roof and Pederson's south workings the lode continues from 8 to 10 ft. wide, where the matrix is unusually quartzose, and the quality of the ore is inferior, owing to the abundance of mundic associated therewith. In the driving from the rise the lode is 7 ft. wide, worth about 3 tons of ore per fathom. The prospects continue good in the north foot stope, where the lode is 8 ft. wide, yielding 4 tons of ore per fathom. The level on the side lode still looks highly promising; it is 1 fm. wide, worth from 3½ to 4 tons of ore per fathom. In the northern stopes the lode is large, and the produce as before, rather irregular; but, on the whole, an improvement has taken place in one of them during the past fortnight, which now turns out fully 3 tons per fathom. In stripping down the roof, the old working for the tramway, &c., some good ore ground has been met with, which pays well, and we are now engaged stoping the same. The ground in Carr's adit has been easier during the past month than before, and we are in hopes of striking a softer stratum, which is much to be desired. The tribute workings here, as well as at the other small concerns, are yielding about the usual returns, and, on the whole, the prospects continue favourable, considering the dark winter months, &c., when nothing can be done at surface. The weather continues extremely cold and stormy, and, no snow of consequence having yet fallen, all ore transport by land is quite at a stand-still.—CHAS. TRELEASE.

ST. JOHN DEL REY.—The directors have received the following report by telegram:—Produce for Nov., 41,819 oits.; cost for ditto, 9638*l.*; profit for ditto, 6143*l.* Produce, 10 days of Dec., 13,433 oits.; yield, 7·646 per ton.

COPIAPO.—Checo Mine: Estimated produce for November:—

	Quantity.	Quality.	Price.	Value.
First class dark ore	512	38	$2·79½	$1430·32
Second class ditto	1184	20		
Third class ditto	192	15	9½ rls.	228·00
Second class green	64	20	15 „	120·00
Total	1952			$5088·32

In the 50 fm. level, east of Price's shaft, the lode in the stopes is still very good, producing 4 tons of good ore to the fathom; a good lode of ore. In No. 2 chiffon, sinking east, the lode is much as when last reported, being about 3 ft. wide, and produces about 25 per cent. ore; a good lode of ore. In No. 1 chiffon the lode since our last report has become very poor, having met with hard ground, and makes great impression on the lode, but this we shall still keep on, and try to get through the hard stone. In the 50 end, driving west, the lode is 1 ft. wide, and poor. Should we meet with metal in No. 1 chiffon, that we are sinking under this level, at once we shall put six men in this end, and send it west as fast as we can, and we hope to have metal in that part as soon as we get through the hard stone that we have at present; we are not working any other lode in this part of the mine at present.—Western Sett: The shaft is down 24 fathoms, and we cannot sink any deeper draft with the tackle, therefore at the bottom we shall cut a plat, and erect another tackle, and still sink away, as the lode in the shaft is very kindly, producing some good stones of ore. As soon as we meet with metals to pay we shall at once put a whim on this shaft, and hope that will not be long.—G. MATTHEWS.

CLARENDON CONSOLS.—J. Martin, Dec. 22: Stamford Hill: We have driven about 6 ft. on the course of the lode in the 108, and find the lode very large, composed of carbonate of lime and a very pretty looking porphyry, almost like granite, with occasional spots of rich yellow ore and jack (blende). The lode in the winze sinking in bottom of the 94, on the middle lode, is about 2 ft. wide, composed of flookan and prian, with mundic and veins of ore; the lode is about 3½ fms. north from the lode the shaft is sunk on in the 94. We intend making a communication to the 108 by this winze, and then sink the shaft below the present bottom with tackle, as the water is very little at present; by doing this we shall not increase the work of the engine. The lode in the 82 south-west is 4 ft. wide, composed of clay-slate and mundic, with prian. We are now getting under where we had the ore in the level above. I hope by driving a few fathoms more in this end we shall see if the ore holds down or not to the 82. The lode in the 70 south-west is 3 ft. wide, composed of gossan, green carbonate, veins of yellow ore, and letting out a quantity of water—more than half the water the engine is pumping comes from this end. We have cut the south-east wall of the lode in the 46, east of cross-course; the lode is about 5 ft. wide, composed of gossan and green carbonate, with black oxides of copper and yellow copper ore, worth about ½ ton per fm. We shall drive a cross-cut from north-east and south-west on it to see what it is like before we drive in the 58 or 70 to cut it. There is a large stream of water coming from this lode, which has lessened the water on the engine.

NEW BLASTING POWDER.—Messrs. Thomas and Emanuel propose the following composition as an improved blasting powder:—Nitrate of soda, sulphur, chlorate of potash, starch, and ground bark, or other absorbent carbonaceous material.

MINING MACHINERY—PRACTICAL REPORT.—The working of Crease's boring and tunnelling machinery has been carefully examined by Captain Martin, of the Cambrian Gold Mine, and we have pleasure in subjoining the report, which cannot fail to be read with considerable interest by mine adventurers generally:—In accordance with your request, I have inspected your boring-machine, now at work at the Vigra and Clogan Mine, and herewith subjoin my opinion thereon. In the first place, it has completely set at rest the much-mooted question of the possibility of using steam underground. The boiler in use in the adit with the machine, was upon the occasion of my visit working with full pressure of steam, and the air in the mine was so good that the most fastidious could not complain; in fact, I am of opinion that it was very much better than would have been the case had there been no boiler there, as the system of ventilation is so perfect, and yet so simple, that the air in the end is quite as pure as it is outside, and, with the exception of being a little warmer, there was no perceptible difference, at the same time the temperature was not sufficient to at all inconvenience the workmen. This machine has only one borer fixed to it, but that was working very satisfactorily, boring through ground which is unusually hard at the rate of about an inch per minute. The success of the boring is indeed extraordinary, considering the fact of its already having been thought an impossibility to bore by steam-power underground, in consequence of the many and varied difficulties to be contended with, and this opinion has been expressed by some of our best mining engineers. But I have been informed, and lately seen, that these great men, and even Professors, too, sometimes err. I am of opinion that the frame of the machine is not of a convenient shape, and that it can be so modified as to conduce greatly to its efficacy, and I have no doubt that with a frame better adapted to the requirements of the place, a speed of fully five times the rate of hand-labour could be attained with ease, but with the present machine I should think that 1½ or 2 fathoms per week could be cut, if competent miners were employed instead of a single lad, as was the case upon the occasion of my visit. Anyone at all conversant with mining could see at a glance by the state of the end, and the numberless, useless, and, I may say, injurious, holes being bored, that a great deal of time and powder were wasted; in fact, it is to be wondered at that any ground of such a difficult nature has been opened at all. I have no hesitation in affirming, notwithstanding the host of bigoted enemies that are working with all their might, that the principle of boring as adopted is thoroughly successful, and that, with a few alterations in the details, it will, in my opinion, prove one of the most useful and valuable inventions of modern times.

Mr. Price, the contractor to whose execution the works on the South-Eastern of Portugal Railway have been entrusted, has just returned from Lisbon, and reports that he will be prepared to open 60 miles of that railway in the month of June next, and the remaining 20 miles very shortly afterwards. It is stated that the works have been executed in a very superior manner, and that they give great satisfaction to the Portuguese Government. One of the engines, the Don Luis, built by Bezer, Peacock, and Co., of Manchester, intended for this line, gained the medal at the late Exhibition.

Mining Correspondence.

BRITISH MINES.

ATLAS.—J. Warren, Jan. 14: Our progress in sinking White's shaft is still very slow. We are down 7 fms. under the 25, and I calculate to reach the 35 by the end of the ensuing month. We have got about 1½ ton of tin on the dressing-floors, which we are now burning and preparing for market.

BOSWORTHEN.—J. Daniel, Jan. 15: The deep adit is extended west of Harvey's shaft 15 fms.; the lode in the end is 2½ ft. wide, composed principally of spar, prian, and iron, with a little tin throughout; on the footwall there is a leader 3 in. wide, containing some good stones of tin; this is come in since we have commenced driving, and the lode has also improved in appearance; set the end to four men, at 30s. per fm. for the month. We are getting plat in course to commence clearing the shallow adit. We shall lose no time about this, as it will soon be necessary to sink a winze to the deep adit for ventilation. On Cairn Braine lode we find tin.

BULLER AND BASSET UNITED.—S. S. Bice, Jan. 13: There is no alteration to notice in the 80 east since our last writing you. In the 60 west the lode is a little harder than usual, still keeping a regular, well-defined appearance, and containing a great deal of mundic, peach, and sometimes producing kindly stones of copper ore. There is almost an entire absence of the oxide of iron, which abounds so plentifully in some parts of the mine. We have an improved run of ground in the cross-cut south at the 80, and, consequently, we are making good progress in driving.

CAMBORNE CONSOLS.—Wm. Roberts, Jan. 14: The 50 east is improved; lode 1 ft. wide, producing 1½ ton of ore per fm. In other parts no alteration to notice.

CARADON CONSOLS.—W. Rich, Jan. 13: The lode in the engine-shaft is much the same in size and appearance as was last reported on. Some good work has been broken in the winze sinking below the 68 during the past week, and also from drivings on the engine lode in the 68 east. We have commenced to drive the 68 west, on Menadue lode. Other parts of the mine are without alteration to notice.

CEFN CILCEN.—W. Davies, Jan. 15: In the engine-shaft little has been since last report owing to the heavy falls of rain, and the men have been wholly occupied in drawing the water, which we completed on Monday last. The winze sinking below the 100 yard level continues worth 15 cwts. per fathom. The 100 yard level, driving west, is worth 10 cwts. per fathom. No alteration in any other part of the mine.

CENTRAL MINERA.—Wm. Davies, Jan. 15: The winze sinking on the lode at its intersection with the great cross is easy for progress, but unproductive for lead at present.

CROOKHAVEN.—Capt. Thomas, Jan. 12: We reached 70 fms. in the shaft last week, since which we have been engaged in properly timbering it. I should recommend to drive north 10 or 12 ft. from the bottom of the shaft, as I am persuaded a strong lode is near at hand in that direction. The water is still very quick in the engine-shaft, no doubt produced from the close proximity of a lode to the north.

CROWAN CONSOLS.—J. Seymour, Jan. 14: The sumpmen have sunk in the new shaft 1 fm. 3 ft., which completes their first contract. The regular course of sinking will be about 2 fms. weekly. The shaft has gone down through two layers of elvan—the first a quarry stone, the deeper one a beautiful soft stuff, much like granite. Not one of these elvans in the district has failed to pay well for the capital invested. We are having the copper and tin picked out from the old burrows near the Dumpling. The carpenters and sawyers' house is completed. One man is at work on tribute in the back of the adit level, and four are driving to the new shaft. There are 21 persons employed in other parts of the mine. The miners are hearty at their work, and many are eager to be employed.

CUDDRA.—F. Puckey, E. Danstan, Jan. 15: The shaftmen are now engaged in cutting the plat at the 90. We shall drive east of the shaft 2 fathoms by the side of the lode, after which we shall cut out the lode to make the plat its full size. The lode in the rise in the back of the 75 east is 5 feet wide, the north part of it being composed of gossan and iron. The south part for 2 feet wide is very promising, and producing saving work for tin. In the stopes in the back of the 75, west of the shaft, we have not taken down any lode for the month. We have again commenced cutting out the lode in the 75 west of the winze, which appears to be very large. We have not yet reached the north wall. In driving this end west of the intersection the lode is looking more promising, and producing some very good stones of tin, but there is not sufficient done to prove its size or value. The lode in the stopes in the bottom of the 60, east of the winze, is 3 feet wide, composed of quartz, peach, and iron, and producing work for tin of a low quality.

CWMBRANE.—Jan. 15: The shaftmen are now engaged in dividing the new shaft, and putting in rods, so that we shall commence with the lift, which will be a great assistance in sinking. The 30 south, on the old lode, will produce 5 cwts. of lead per fm. The 10, on the north lode, is 3 feet wide, and producing good stones of lead. The rise in the back of this level will produce 6 cwts. of lead per fm. The stope in the bottom of this level 6 cwts. per fm.; the stope north of the rise 6 cwts. per fm.; Floyd's stope 8 cwts. per fm. No alteration in any other part of the mine.

CWM ERFIN.—Jan. 13: The lode in the 32, going east of the boundary, is 1 yard wide, composed of clay-slate, quartz, blende, and some small veins of lead ore—a very promising lode. There are three stopes working over the back of the 32, the lode yielding on an average from 12 to 15 cwts. of lead ore per fathom. The 20, going east of the boundary, has slightly improved; the lode in the end is 4 feet wide, containing clay-slate, quartz, and small branches of lead ore disseminated throughout. We have four stopes working over the back of the 20, the lode is about 4 ft. wide, and yielding on an average from ¾ to 1 ton of lead ore per fathom. The 10, going east of the boundary, has continued to open out some good ore ground since last report; the lode in the present end is 1 yard wide, composed of clay-slate, carbonate of lime, quartz, and lead ore, yielding about 1 ton of the latter per fathom. I beg to remark that this level is suspended for the present, and the men gone to sink close to the present end, with a view of communicating with the workings below. There is about 5 fms. of ground between the two pares, and I calculate it will take us about three weeks to effect the communication. The lode in the 10, going west of the cross-cut, is 6 in. wide, carrying a leader of lead ore about 2 in. wide, and shows symptoms to further improve. There are four stopes working over the back of the 10; the lode yielding on an average about 15 cwts. of lead ore per fathom. The opening out of the adit level, east of the drawing shaft, has been kept up with a full pare of men, and I am glad to say that good progress has been made. The weather keeps nice and open for surface operations, and we are getting on fairly towards another sampling.

CWMHEISIAN (GOLD).—Capt. Williams, Jan. 12: East Mine—New Shaft: Our progress in sinking here (six miners and three labourers) is 2 feet; ground hard for boring. The size of the lode we do not know. We cut our shaft 7 ft. by 5 ft., all lode stuff. The silver-lead improved very much, and the smalls in the kibbles contain (by vanning) specks of gold.—Waterfall Lode: We have driven on this lode since my last (by four miners) 6 ft. The ground is easier and more water oozing from the forebreast, which shows sulphur and lead. The lode continues much the same in size, but more promising. Mr. Mitchell's machinery will soon be ready, and Mosheimer's machinery will arrive in a few days.

DEVON AND CORNWALL UNITED.—T. Neill, Jan. 13: I do not see much alteration to report on, except at William and Mary, where, in the 22, west of shaft, in taking down part of the lode we find it improved, but to what extent I can scarcely say until more has been done thereon.

DEVON NEW COPPER.—P. Hawke, Jan. 14: A great improvement has taken place east in the 88; we have nearly got through the hard floor of capel that was met with previously to the end being temporarily suspended; I have reason to expect, from the change occurring, that we shall again shortly cut into fluor-spar, mundic, and yellow copper ore, at this point. A change also occurs east, in the 100; on nearing the leader the ground becomes more mineralised, and the water increases as we progress towards the productive part of the lode. The erection of the water-wheel and other surface operations are progressing most satisfactorily.

DEVON WHEAL BULLER.—W. Stephens, Jan. 13: The 55, west of Down's shaft, has been driven 5 fms., carrying about 3 ft. of the lode, which is composed of capels and peach, and is set to three men and three boys, at 1*l.* 11s. 6d. per fm., stent 10 fms. The 55, east of Down's shaft, has been driven 2 fms. 2 feet on the couse of the lode, which is composed of capels, peach, prian, mundic, and a little black ore, and is set to two men, at 2*l.* 5s. per fm., stented 3 fms. The shaft is sunk about 10 fms. below the 55.

DOLFRWYNOG.—Jan. 9: The requisite machinery, water-wheel, &c., purchased by the company, is being delivered on the mine. We are levelling the top of No. 1 shaft, and re-timbering the same. I was underground at Bog level yesterday, and reached No. 2, or Gold shaft, and I was glad to find the parts I spoke of, between Nos. 3 and 2, untouched, from which I broke out some very nice stuff. We have to repair the road at surface a little to bring the wheel up. After a few days' work on one or two different parts of the mine, I shall be able to give you a more favourable report.

DULTA.—J. Martyn, Jan. 13: Dyer's lode is looking very well. We are driving west on Snell's lode, to cross-cut Richards's lode, where all the good work was taken from in the former working. The water being short at present somewhat impedes the stamping. We are driving the south cross-cut, to intersect three lodes, which are very near, and the ground good. We have better ground in the bottom cross-cut, and have cut two branches, which yield tin that will pay for stamping. Had we more water and more stamp-heads we could make good returns of tin. We could supply 60 heads of stamps with profitable work. The mine throughout is looking well.

EAST BRONFLOYD.—C. Williams, Jan. 13: The lode in the stope west of engine-shaft is 8 ft. wide, consisting of slate, spar, and ore, yielding of the latter 23 cwts. per fm. The lode in the 10, east of shaft, is 31 ft. wide, yielding 30 cwts. of silver-lead ore per fm. In the cross-cut north in bottom of engine-shaft we have cut into the lode about 4 ft. 6 in., which will produce 20 cwts. of silver-lead ore per fm.; after cutting fairly through the lode I shall commence driving east on its course, as the ground to the west of us is unproductive. The prospects of our mine, as compared with neighbouring ones, may be judged from the fact that we have only laid out something like 1200*l.* (including all the machinery), and are already dressing large quantities of ore, and I hope in another eight months to be able to send to market 50 tons monthly, whilst no neighbouring mine exceeds 30 to 40 tons monthly, after many years' work and an expenditure of 10,000*l.* or 11,000*l.*

EAST CARADON.—J. Seccombe, Jan. 14: Caunter Lode: The 50 east is worth 70*l.* per fm.; the 60 east is worth 20*l.* per fathom; the 70 east is worth 40*l.* per fm.; the 70 west from 30*l.* to 35*l.* per fm., both parts.—New Lode: The 60 east is worth 25*l.* per fm.; the 70 east is worth 30*l.* per fm.; the 70 west 30*l.* per fm.

EAST CARN BREA.—T. Glanville, J. Scholar, Jan. 14: In the 60, west of cross-cut, the middle lode is yielding 3 tons of copper ore per fathom. In the 50 west the middle lode is yielding 1 ton of ore per fm. In the winze sinking below the 50 the middle lode is yielding 1 ton of ore per fm. In the 50 west the south lode is yielding 1 ton per fm.

EAST CLOGAU (GOLD).—K. Roberts, Jan. 10: In No. 1 level, on St. David's lode, our progress in driving is 10 feet this week; the ground here is a little more favourable for working: the lode presents just the same appearance as last week. In No. 2 level, on St. David's lode, our progress in driving here is 9 feet; the ground is easier for excavating: the lode is 2 feet wide, and looking more promising than for some time past. No. 1 level, on St. James's lode, has been driven 6 feet; no change to report here this week. In No. 2 level, on St. James's lode, we have driven 3 feet; the lode at this end is much the same as stated in my last. No. 1 level, on St. John's lode, has been driven 3 feet; the lode still continues its encouraging appearance, and I think it will not fail to be productive as depth is attained.

EAST GRENVILLE.—G. R. Odgers, Jan. 14: The lode at the engine-shaft sinking below the 55 is from 2½ to 3 ft. wide, with ore and tin embedded in quartz and peach, presenting a strong and kindly appearance. The lode in the 55 east, as we get away from the cross-course, is becoming larger, with a little tin and ore. The lode in the rise above the 55 west is 2½ ft. wide, producing saving work for tin. The lode in the 45 east is from 20 in. to 2 feet wide, composed of tin and good yellow ore, worth 5*l.* per fm. for tin. The lode in the 45 west is 2 ft. wide, composed of quartz and peach, with ore and tin, worth 6*l.* per fathom; the lode in the two stopes in back of this level are worth from 8*l.* to 10*l.* per fm. each. The stope above the 35 east is worth 5*l.* per fm. The lode in the 45, west of cross-course, on the new lode, is small, yielding stones of tin

EAST GUNNIS LAKE AND SOUTH BEDFORD.—J. Phillips, Jan. 15: The lode in the 36 east has improved since last reported on; it is now worth 5 tons of good ore per fathom. There is no change in any other part of the mine.

EAST JANE.—W. Hancock, Jan. 15: The western shaft is sunk 11 fms. 3 ft. under the deep adit; the ground is of a beautiful character for a productive lode. No other change worthy of remark in any of the different bargains since my last. We shall have about 11 tons of lead cleaned by Saturday next.

EAST TRESKERBY.—J. Nancarrow, Dec. 10: The ground in the 40 north is just all that can be desired for the production of ore. In working further south, in the 40 west, we have good stones of ore, and think we now have the principal part of the lode, which indeed looks very promising. There is not quite so much ore in the 40 east as last week; the lode is in its general appearance much the same. The ground in the 55 east is improved, so that we can now make better progress in getting under the ore gone down in the 40.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 14: In the 120, in Maynard's cross-cut north, the lode is cut into about 3 feet, which is composed of capel, iron, gossan, quartz, prian, grey sulphate, red oxide, and green carbonate of copper ore; as far as cut into the lode has a very promising appearance; we have every reason to believe, when the lode is cut through, it will be found a productive lode, the character of which is everything one could wish. In the 120 east the lode is 2½ feet wide, composed of quartz, prian, mundic, and a little yellow copper ore; this level has to be extended about 5 fathoms to come under where we may expect an improvement in the 110. In the 110 east, and east of Soper's cross-cut, on the south part of the lode, the lode is 2 feet wide, unproductive. In the 110 east, and west of Soper's cross-cut, the lode is 3 ft. wide, composed of capel and quartz, and will produce ½ ton of copper ore per fm. John's stope, in the back of the 110, is worth 20l. per fm. In the 110, west of Fewin's cross-cut, on the north lode, the part of the lode being carried is 4 feet wide, composed of gossan, quartz, prian, and spotted with black oxide of copper ore, a fine-looking lode. In the 88 east there has been no lode taken down since last reported on. In the 66 east the driving has been continued by the side of the lode, in favourable ground for progress. In the 45 east the driving has continued by the side of the lode in elvan of a favourable character. In the 88, west of Hitchins's engine-shaft, the lode is 1½ foot wide, producing saving work. In Mollard's cross-cut, in the 88 north, there is no change to report upon, the ground being killas, capel, quartz, &c.

— J. Richards, Jan. 15: Homersham's Shaft: In Maynard's cross-cut north, in the 120, progress is slow; the lode is, however, cut into 3 ft., and is very promising, being composed of capel, quartz, iron, gossan, prian, and good stones of grey sulphuret, red oxide, and green carbonate of copper, and, judging from appearances, the most productive part of the lode has yet to be cut through. In the 120 east, on the south part of the lode, the lode is 3 ft. wide, and consists of capel, quartz, prian, mundic, and a little copper ore. There remain some 6 fathoms more to be driven to come in under the ore gone down in the level above (the 110). In the 110 east, and east of Soper's cross-cut, on the south part of the lode, the lode is 2 ft. wide, and for the present without ore. In the 110 east, west of Soper's cross-cut, on the south part of the lode, the lode is worth ½ ton of ore per fathom. In John's stope, in the back of the 110, the lode is worth 20l. per fathom. In the 110 east, west of Fewin's cross-cut, on the north part of the lode, the part of the the lode being carried (4 ft. wide), is composed of gossan, prian, and a small proportion of black oxide of copper ore. In the 88 east the drivage is by the side of the lode, in favourable ground for progress. In the 66 east the drivage is still being continued by the side of the lode, and good progress is being made. In the 45 east, and east of the tunnel, the drivage is also chiefly by the side of the lode. The ground has undergone a very favourable change, being principally elvan of a soft nature, and good stones of ore are being obtained. In the 88 east, Mollard's cross-cut north has been resumed, as more lode is supposed to be standing in that direction. In the 88, west of Hitchins's engine-shaft, the lode is from 1 to 2 ft. wide, and yields some good saving work for copper ore.

EAST WHEAL TOLGUS.—Jan. 14: Redruth Consols Lode: The lode in John's shaft, sinking below the 82, is small and poor. The ground in the 82 cross-cut north is hard, and the ground in the 34 cross-cut south is rather hard. The lode in the 34 east is 18 in. wide, and looking promising for improvement. The ground in the adit cross-cut south is moderately easy; we cut a branch in it yesterday, but cannot say the size of it; it is cut into 5 inches, but not cut through. Captain Bray brought up some fine stones of ore with him, and says 3 in. out of the 5 in. cut into is solid ore; we shall be able to see more about it in a day or two. The lode in the adit end, east of new shaft, is small and poor.

GAWTON.—G. Rowe, Jan. 10: During the past week our men at the 36 have been principally engaged in timbering the ground, and putting in stull, consequently but little has been done in opening on the lode, which is still looking exceedingly well.

GREAT BRIGAN.—T. Trelease, G. Oates, Jan. 10: The lode in the 61, driving east of engine-shaft, is a little improved; it is now 2 ft. wide, and worth from 15l. to 18l. per fathom—a very promising lode. The lode in the 49, east of cross-course shaft, is much the same as last reported. In driving the cross-cut north at the 42, east of said shaft, we have intersected the north part of the lode; it is 18 in. wide, composed of capels and spar, intermixed with spots of copper ore, but not to value. The lode in the winze sinking below the 32, east of Trelease's shaft, is split into branches. No lode yet intersected in the cross-cut south of trial shaft at the deep adit level. North Treskerby lode at this level, driving west of Oate's shaft, is 18 in. wide, containing a little ore, but not to value. We are getting on very well in putting in skip-rod at the cross-course shaft, and shall be in a position to draw in the course of next week.

GREAT NORTH DOWNS.—T. Trelease, Jan. 10: Yesterday being our tutwork and tribute setting, I beg to give you particulars of the same. Vivian's engine-shaft to sink below the 47, by 12 men, at 45l. per fm.; to cut the lode, which we expect, from its underlie in the level above, to meet with in 5 ft. more sinking, when we hope to go on with more dispatch, as the lode is very porous in the 47 above, and from the present prospects we have every reason to expect to find it the same when the intersection takes place. The 47 to drive west of the above shaft, on Vivian's lode, by six men, for the month, at 5l. 10s. per fm.; the lode in the end has improved, now worth 18l. per fm.; the leading or south part of the lode in bottom of the end is 3 ft. wide, orey throughout, and very porous, with a large stream of water flowing from the bottom, whilst the upper part of the end is quite drained; we look upon this to be of great importance to the mine, being at the bottom level, and not more than 3 fms. west of the engine-shaft. The 40 to clear east of Sieggin's shaft, by two men and one boy (so far east as the boundary, to join Wheal Rose), at 7s. per fathom; the lode appears to be all taken away in the back and bottom of this level for a considerable length. A cross-cut to drive south of Bawden's shaft, by three men and three boys, for the month, or cut the Coal-yard lode, at 7l. per fathom. A cross-cut to drive south of Lord's east shaft, to intersect the tin lode, by two men and two boys, at 7l. per fm. The 20 to drive east of Gribble's shaft, on the New Brigan lode, by four men, at 90s. per fm.; lode 1 ft. wide, producing stones of ore of a more promising appearance. In driving the cross-cut south at the 17, from Brown's diagonal shaft, we have intersected the Wheal Peevor tin lode, and cut through it; it is about 3 ft. wide, composed principally of capels, with a little quartz, spotted with copper ore, and producing a small portion of tin, but not sufficient to value; we are of opinion that this lode is not intersected below this level in the eastern part of the sett, as the old workers appear to have entirely lost this lode for tin in the western part of the sett about the great cross-couse, and we see no reason why it should not be found equally so here. The ground is also easy for exploring. We have set to drive east and west on its course to six men, 4 fms. stent, at 60s. per fm. We have set a contract to six men to cut down a stope of ground at the bottom of Jenkins's shaft, also to put in skip-road from the 38 to the 47, for the sum of 12l. We set 15 pitches on tin and copper, varying from 8s. to 13s. 4d. in 1l. We have put the crusher to work, and it answers very well, and intend to sample the copper ore as soon as we can get it dressed. The water is just the same at Job's shaft, and we do not intend putting the flat-rods to work again before the rainy season is past.

GREAT RETALLACK.—Wm. H. Reynolds, Jan. 13: The shaftmen will complete their contract to cut plat at the 60, case, and divide shaft, &c., in three or four days, when we shall resume sinking the shaft. The blende pitches are poor at present. The Peru lode in the winze below the 35 is small, but of a promising appearance. The tributers on this lode, in the back of the 35, are raising some good work. We shall sample to-morrow two parcels of blende, particulars of which shall be duly forwarded.

GREAT SOUTH TOLGUS.—J. Daw, Jan. 14: On Friday last the following bargains were set:—In Lyle's shaft, sinking below the 140, the lode is 8 ft. wide, worth 80l. per fathom for tin. In the 140 west, on the tin lode, the lode is 4 ft. wide, worth 12l. per fathom for tin; set to four men, at 7l. per fm. In the 140 east the lode is 1 ft. wide—unproductive; set to four men, at 6l. 10s. per fm. In the 125, west of Lyle's shaft, the lode is 1 ft. wide, producing a little copper ore, but not enough to value; set to four men, at 3l. per fm. No lode has been intersected in the 125 cross-cut south in the past month; set to four men, at 7l. per fm. In the 125, east of new shaft, the lode is 1 ft. wide, producing stones of copper ore; set to four men, at 4l. per fm. In the 112, west of Lyle's shaft, the lode is 1½ ft. wide, producing some very good ore, and looking kindly for improvement; set to four men, at 3l. per fm. In the 112 east the lode is 1 ft. wide—unproductive; set to four men, at 4l. per fathom.

GREAT WHEAL BADDERN.—John Jenkin, Jan. 10: The shaftmen have been engaged in putting down 33 fms. of main rods, plunger-lift, plunger-pole, stays, &c., the last fortnight. We hope shortly to commence sinking under the 63. The new shaft sinking down on the 12, on the tin lode in the western mine, is now sunk about 9 fms. from surface. We are pushing on our operations with all possible speed.

GREAT WHEAL BUSY UNITED.—T. Trelease, J. Petherick, R. Giles, E. Richards, Wm. Trelease, Jan. 13: In driving the 130 east of Harvey's engine-shaft we have intersected a small cross-course, which has rather disordered the lode; it is now about 2 ft. wide, worth from 20l. to 30l. per fm. The lode in the 130, driving west of this shaft, is large, producing stones of copper ore. The lode in Offord's shaft, sinking below the 120, is still about 2 ft. wide, producing stones of tin. The lode in the 120, driving east of Offord's shaft, is small and poor. The lode in the 110, driving east of this shaft, is small, producing a little tin, but not to value. In driving the cross-cut south in this level we have cut through the elvans, but have not yet discovered any lode. The lode in Ham's winze, sinking below the 100, is not quite so good, being now worth 40l. per fm. The lode in the 100, driving east of Mathew's shaft, is 5 ft. wide, worth 30l. per fm. The lode in the 100, west of Fielding's shaft, is still small and unproductive. The lode in the 90, east of Mathew's shaft, is large, and producing a little tin, but not of much value. The lode in the 50, driving west of Black Dog shaft, is large, producing stones of tin.—Boscawen's Mine: We have communicated Kitelee's shaft to the 70, and the men are now engaged in casing it down for the purpose of drawing, which we hope to be able to complete in a few days, when we purpose driving the 70 fathom level east and west with all possible dispatch. Hunter's shaft is now sunk 8 fathoms below the 60; the lode is looking a little more promising, and letting out more water. The lode in the 60, driving west of Hunter's shaft, is 2 ft. wide, unproductive. The lode in the 50, driving west of this shaft, is 18 in. wide, worth 3l. per fm. Nothing else new in these mines since our last report.

GREAT WHEAL FORTUNE.—J. Vivian, N. T. Miners, T. George, Jan. 12: Old Mine: The cross-cut in the 95 is driven north from Harvey's engine-shaft 18 fathoms; driving by six men and three boys, at 11l. per fm. The rise in the back of this level, on the branch, is communicated with the 85. The 85, driving east of Harvey's shaft, is worth 10l. per fm. The 70, driving east, is worth 11l. per fm. The 60, driving east, is worth 10l. per fm. The 50, driving east, is worth 8l. per fm. The 40, driving east, is worth 10l. per fm. The 30, driving east, is worth 6l. per fm. The 20, driving east, is worth 9l. per fm. The 60, driving east of cross-course, is worth 8l. per fm.; this level has been recently commenced, which is on a sett of branches 32 fms. north of the Conquer branches, and standing entire through the whole length of the sett; those branches will be intersected in the 90 cross-cut in about four months; we intend to commence opening on them in the 30 shortly. The lode in the 50, driving east of Blue Burrow shaft, is worth 6l. per fm.—Carnmeal: The engine-shaft is sunk 10 ft. below the 90. The 90 is driven east 18 fms.; this level has been more productive than the 78, as far as yet opened on, having been worth in places 35l. per fm.; the lode in the present end is large, and very kindly in appearance, producing a little tin—an improvement is anticipated. The lode in the winze sinking below the 78 is worth for its length, 10 ft., 20l. per fm. The lode in the stopes in back of this level, east of No. 2 winze, is worth 100l. per fm. The stopes west of this winze are worth 30l. per fm. The lode in No. 1 stope, in back of the 68, is worth 40l. per fm. The lode in No. 2 stope is worth 12l. per fm. The lode in the 78, driving east of Hosking's flat-rod shaft, is 5 ft. wide, saving work. The lode in the 68, driving east, is at present unproductive. The lode in the stopes in back of this level, west of shaft, is worth 10l. per fm. The lode in the 48, driving east of eastern shaft, is worth 5l. per fm. The lode in the 18, driving east, is worth 6l. per fm. The tribute pitches throughout the mine continue to yield an average quantity of tin. The returns for the quarter will be about 120 tons of black tin.

GREAT WHEAL MARTHA.—G. Rickard, Jan. 15: The lode in the 64 has the same kindly appearance as last reported, producing good stones of copper ore. We have an opinion the ore-bearing part of the lode is further south, as we have it so in different levels throughout the mine. The lode in the 52 west is occasionally producing good stones of copper ore, with indications of an early improvement. The winze sinking below the 40 is producing fully 3½ tons of copper ore per fm. After a communication is effected with the 52 we shall be in a position to stope east and west in good orey ground. The lode in the 10 is divided by a horse of killas, the north part producing about 2½ tons of copper ore per fm., and the south part about 1 ton per fm. Our tribute department has improved a little since last reported. We are busily engaged preparing for our next sampling. All the machinery and surface operations are going on satisfactorily.

GRESTAN.—J. Kemp, Jan. 15: Parry's shaft is down to the 20, and we have cut a branch of ore at the bottom. I think it will still be better to take the shaft a few yards deeper before cross-cutting to the main lode. The stopes above the 20 are yielding some good lead, and when the level is communicated with the shaft we shall have a piece of good paying ground to work on.

GWYDYR PARK CONSOLS.—Capt. Smyth, Jan. 16: Not having taken down the lode in Gwydyr Park adit level this week I cannot report any change; there is, however, more water coming from the end, which we suppose may be attributed to our nearing the caunter. In Gwyn Lilfion deep adit the lode is getting wider, now about 9 in. wide, composed of spar, mundic, and gossan, and seems likely to open wider; the air is close in the end, and we shall put in air-pipes next week for ventilation.

HARWOOD.—J. Race, Jan. 9: We have holed from the drift to No. 2 cross-cut, and begun to stope the vein; the end of the drift is worth 3 tons of ore per fm. The under foot stope east is worth 1½ ton per fm. The stope west is worth 1 ton per fm.; both set at 45s. per fm. We have commenced to drive No. 1 cross-cut west of this ground, and expect it will very soon cut the vein. As soon as we have put a hopper in at No. 2 cross-cut, and done some repairs to the rails, we shall commence to drive No. 3 cross-cut in the eastern ground.

HAWKMOOR.—J. Richards, Jan. 13: The lode in the rise in back of the 50, west of engine-shaft, is 1½ ft. wide, producing occasional good stones of copper ore. In the 30, west of Graham's shaft, the lode is about 1½ ft. wide, composed principally of capel.—West Hawkmoor: No. 3 lode, driving west of the adit level, is 2 ft. wide, composed of capel, peach, and occasional good stones of tin ore. In the level driving east of the stopes the lode is full 2 ft. wide, composed of peach, mundic, and some very good saving work for tin ore. No. 4 lode, driving west of the adit level, is divided into branches of a tin-bearing character, and in all probability will be productive for tin ore as we approach the cross-course ahead.

HOLMBUSH.—F. Pryor, R. Pryor, T. Woolcock, J. Borlase, Jan 9: The lode in the 172, east and west of shaft, is looking much the same as when last reported; it is opening up tribute ground. In the end driving east of winze, in bottom of the 160, the lode is worth full 25l. per fm. The 160, west of shaft, is improving. The winze in bottom of the 160, west of the lead lode, is worth 10l. per fm. In cutting through the lode from the 40 to the 20, on flap-jack lode, we find it to be about 4 ft. wide, composed of mundic, capel, and copper ore, worth of the latter full 2 tons per fm. We have to-day set the midway level, called the 30; from the appearance of the lode and ground driven through in the 20 we expect this lode will lay open some good tribute ground. The lode in the adit level, east of cross-cut, from Huel Down shaft, is improving as it gets off from the cross-course. The tribute department, on the whole, is looking much the same. The machinery is all in good working order. We sampled (computed) 204 tons, which will weigh off little over the above quantity.

KELLY BRAY.—S. James, Jan. 10: The lode in the pitches generally has improved in the past week. We shall sample November and December ores on Jan. 12, which will, we hope, weigh off 150 tons, or upwards. No change to notice in any other points which are in operation since last reported.

KESWICK.—Jan. 10: The end of the adit level is very close and hard at present. We seem to be in a bar of ground, and as is generally the case, the vein is small and unproductive. The stope over the adit is about the same for lead, but the ground is closer. The 40 north end is also in close ground. The stratum, however, is kindly for lead. The vein is small and unproductive. In the 50 north end we have had spots of lead all the week, and yesterday we broke some very nice lead from the lower part of the end; I can scarely give its value per fathom as yet, but, as now standing, will probably yield 8 cwts. per fathom. I fully expect that we shall have it better in a day or two; the end looks very kindly; the vein is strong, and the ground rather close. We have a little lead in Brunskill's rise over the 50. We are sinking in the 40 to meet this rise, where we have also a little lead; I fully expect to hole this through next week. In the 50 south end the ground is not quite so loose. The vein is strong, and is extremely promising in character; indeed we have spots of lead and jack now in the end, and believe that we shall have more lead soon. The water in the mine has abated a little, but is still heavy. We have still a little lead in the rise at Old Brandley. About the middle of the week we seemed to have cut it all out, but yesterday we broke nice stones again. The lead is chiefly in loose lumps, quite pure, and will at present pay cost of working.

LADY BERTHA.—Capts. Harpur and Metherell, Jan. 12: The lode in the 53 east is composed of peach, mundic, and occasional stones of ore. In the 41 east no lode has been taken down during the past week; we shall take it down again shortly. The lode in the winze in the bottom of the 41 is from 4 to 5 ft. wide, composed of quartz, mundic, and ore, worth of the latter 1½ ton, or 4l. 10s. per fm. In the 30 east we are driving by the side of the lode; here also we shall take down the lode by next report day. In the stopes in the back of this level the lode is about 3 ft. wide, composed of mundic, quartz, and ore, worth of the latter 3 tons, or 9l. per fm. The lode in the eastern stope in the bottom of the 20 east is 2 ft. wide, composed of mundic, quartz, and ore, worth of the latter 2 tons, or 6l. per fm.; and the western stope is worth 3 tons of ore, or 9l. per fm. The tribute pitches are yielding much the same as for some time past. At the new eastern shaft we intend to commence sinking as fast as possible, to communicate with our 30 fathom level.

— Capts. Harpur and Metherell, Jan. 15: The lode in the 41 east is about 2 ft. wide, composed of mundic, quartz, and ore, worth of the latter 1 ton, or 3l. per fm. No change in the appearance of the lode in the winze sinking below the bottom of this level. In the 30 east the lode is between 3 and 4 ft. wide, consisting of peach, mundic, quartz, and ore, saving work. The stopes, pitches, and all other parts of the mine present much the same appearance and character as when reported last Monday.

LOWER PARK.—W. Davies, Jan. 15: The eastern shaft is going down satisfactorily; we are down 6 yards below the 40, and expect shortly to reach the 60 yard level. The cross driving south from the 26 yard level, on the office shaft, is become much harder for progress. The rise in the back of the cross is producing a little ore. The 40 yard level, driving west from Stuart's shaft, is hard for progress, and produces a little ore.

MOLLAND.—T. Bennetts, Jan. 14: The lode in the 52 east is 2 ft. wide, producing a few stones of ore, though nothing to value; ground easy for driving. The lode in the winze sinking below the 42 east is 3 ft. wide, presenting a promising appearance, and producing good stones of coated and yellow ore. The stopes in the back of this level are producing 1 ton of ore per fm. The stopes in bottom of the 32 east are producing 1½ ton of ore per fathom. We are now dressing the grey ore from the 62 by itself, and when dressed up I shall assay a sample of it to ascertain its value.

NANT-Y-IAGO.—J. Roach, Jan. 10: We have removed all our underground stuff from the upper levels to the bottom of the mine, consequently we are driving the 20 fm. level west by side of the lode, and shall commence driving the same level, east of shaft, on Monday next; we shall cut down the lode very soon, when you shall be advised of its character and value. The lode in the winze under the 10, 8 fathoms east of shaft, is looking very well, and likely to improve; it is now yielding full 1 ton of lead ore per fathom; this is perfectly free from water, being drained by the operations in the lode at the bottom of the shaft. The lode in the winze under the 10, about 30 fathoms west of shaft, is large, and at present contains from 20 to 25 cwts. of ore per fm. All operations are carried on with economy and regularity.

NETHER HEARTH.—J. Race, Jan. 12: As you requested, I have visited Nether Hearth Mine to-day, and I am glad to see your prospects so encouraging. I was down Montebello shaft, on the high vein, and they have a beautiful mine here. The ends in the upper part of the limestone are worth 1 ton of ore per fathom, and going down in the bottom there is a course of ore 6 inches wide, and there is no doubt but it will be much better if they were down to the middle flat. You will surely have a good mine here. Instead of attempting to work this vein from the shaft you have proved it in, I would strongly recommend you to drive up the new level (already driven about 40 fms.) in the cross vein. The cost of raising the ore from this shaft, with lifting water, preparing dressing-floors, making a road, and other expenses, would go with a great part of the produce, whereas the level is already in connection with the dressing-floors and crushing mill. The cross-vein the driving is to be continued in has been productive to the north, in the same limestone you will drive the level in, so that I think it very probable you may get ore to pay cost of driving it, or even more. And in this ground you have four east and west veins to cut. I should think each of them a very good speculation in itself, not to mention the fifth or high vein, where you have already a good mine laid open. If this level is driven up it will drain the water from all these five veins, then you will have nothing to do but bring the ore right out to the dressing-floors and crushing-mill, with every convenience ready made.

— W. Vipond, Jan. 10: We have finished taking the stope from shaft to the vein and have begun driving west. We have ore in the end, and the whole height is good towards the bottom, and going down in the sole the ore is 6 in. wide, and solid. There is evidently a good course of ore before and below us, the deeper down the better it is.

NEW TRELEIGH.—S. Mitchell, Jan. 12: We have gathered up about 30 tons of coppery blende, and sent a sample to a company in Swansea who buys ore of this sort, and shall know the result in a fortnight, and should this blende pay, a great many more tons might be gathered up and sold. We have had great difficulty in getting down the pitwork in Good Fortune shaft, but am glad to say it has been done without an accident. The shaft below the 40 is much larger, and there is every probability of our making a more speedy progress, and hope soon to get down to see the lode in the deep levels; I do like the appearance of the lode as far as I have seen it, and have no doubt when the mine is cleared up we shall be able to raise a pretty deal of ore.

— Francis Pryor, Samuel Mitchell, January 15: In the 90 fathom level, east of Carr's engine-shaft, the lode is from 2 to 3 feet wide, and of a very promising appearance; the lode is spotted throughout with ore, and is letting out more water, which we consider a good indication for an early improvement. The 80 fm. level, east of Carr's, is at present poor, although it is well defined. We have 10 fms. more to drive to reach the orey ground in the 70 fm. level. The 70 fm. level east is not quite so good as last week, being at this time disordered by a branch which came in from the north; this, however, we do not pay much attention to. In the 70 fm. level west we have good stones of ore. We have fixed the plunger-lift at Good Fortune, and are pleased to say it is working all right, and by Saturday next we shall be in fork to the 50 fm. level, and thus be enabled to drive west at this point. We have been compelled to use Good Fortune shaft for the purpose of sending down the pitwork, &c., which has been the means of hindering the tributers from sending up their ores, and therefore we shall be obliged to defer our sampling for another week, when we calculate to have from that part of the mine. Nearly 30 tons of ore, and before another sampling we shall be in a position to report on some of the western levels. At this part of our sett, and if reports can be relied on, we shall soon be in a position to lay open some good ground. We calculate our sampling to be a little over 70 tons.

NORTH BASSET.—T. Glanville, G. Davey, Jan. 14: There is no alteration to notice in any part of the mine since our report of last week. We sold on Saturday last to Bissoe Tin Company 3 tons 2 cwts. 3 qrs. 23 lbs. of black tin, at 64l. per ton, =201l. 9s. 1d.

NORTH LAXEY.—R. Rowe, Jan. 13: Since my last report, the lode in the 50 south has been better than at any time before, producing some rich work, but to-day it scarcely looks so well; it is yet worth over 1 ton of ore to the fathom. The lode in the 50 north is getting smaller and poorer, but this I am not surprised at; our mine clearly lies in the south ground, and in depth. The 38, driving south, has a very promising lode in it, but yet not sufficient ore to value.

NORTH MINERA.—Jan. 15: The caunter lode, south-east of Charles's shaft, is worth 18l. per fm. The driving west, on same lode, is worth 15l. per fm. The driving, west of eastern shaft, is worth 10l. per fm. The stope in back of the 15, west of eastern shaft, is worth 8l. per fm. The stope in back of the 15, east of shaft, has greatly improved during the past week, and is now worth 17l. per fm.

NORTH TRESKERBY.—R. Pryor, J. Tregoning, R. M. Kitto, Jan. 15: There is no change to notice in the engine-shaft since our last report; we hope to take down the lode some time next week. The 77 fm. level, east of this shaft, will yield 2 tons of good ore per fathom, and has a promising appearance. The lode in Highburrow shaft, sinking below the 67 fm. level, is worth 20l. per fathom for the length of the shaft (8 feet); this shaft is down about 3½ fms. below the level, and in advance of the 77 end about 3 feet, which speaks well for a further improvement in the 77 fm. level, as the ore appears to dip east. The lode at Tresidder's shaft continues much the same as for some time past. The 77 fm. level, east of shaft, is worth 7l. per fathom. The lode in the rise in back of this level, west of shaft, is worth 8l. per fathom. The lode in the 67 fm. level, east of shaft, is worth 10l. per fathom; we are daily expecting a great change for the better in this end, as it is coming under a good bunch of ore, driven through in the level above. Other places much the same as for some time past. We sampled yesterday 395 tons of our usual quality ore.

NORTH WHEAL LUDCOTT.—W. Hancock, Jan. 14: In costeaning we have cut some branches containing mundic and gossan. No other change worthy of remark since my last. I will try and open on the lode near the river a little more next week.

NORTH WHEAL ROBERT.—W. Godden, Jan. 15: The No. 1 south lode, in the 30 end, east of Edwards's cross-cut, is 18 in. wide, good saving work. The tin lode in the 42 end, west of the trial shaft, has been taken down. The lode in the eastern end is 4 ft. wide, saving work for tin, and is yielding good work for copper ore. The lode in the western end is 18 in. wide, yielding stamps work. We have taken down the lode in the 20 end, west of the trial shaft, where the lode is 2 ft. wide, saving work. All other parts are much the same as when last advised.

NORTH WREY.—T. Kemp, Jan. 15: The lode in the 38 has considerably increased in size during the last 2 fathoms driving; the part now being carried with this level is quite 4 ft. wide, composed as before reported, and occasionally producing some good stones of silver-lead ore; it is a very kindly lode. Everything in good order, and we are pushing on with good speed.

OKEL TOR.—W. B. Collom, Jan. 15: In the 80 the cross-cut north is driven from 2 to 3 fms. towards the main part of the lode, and the ground is becoming wetter; there are six men employed here. In this level there are three pitches at work—one at 10s. in 1l., by four men; one at 12s. in 1l., by two men; one at 13s. 4d. in 1l., by two men. In the 60 east, driving by four men, on the south part of the lode, the lode will yield 5 tons of ore per fm. In this level there are three tribute pitches at work—two at 10s. in 1l., by ten men; one at 11s. in 1l., by four men. In the 50 east, driving by four men, the orey part of the lode is from 1 ft. to 18 in. wide, and getting larger. The killas by the side of the lode has much improved. In this level there are five pitches at work—one at 5s. in 1l., by four men; one at 8s. in 1l., by six men; two at 12s. in 1l., by four men; one at 11s. in 1l., by two men. The pitches generally are looking very well, and yielding quite equal to our expectations. The number of tributers breaking ore is also double to that employed before.

OLD WHEAL NEPTUNE.—W. H. Richards, E. Harvey, Jan. 14: Since last report the shaftmen have been engaged putting in bearers and cistern, which is now completed; they will at once commence fixing house-lift, &c. We have cleared the adit home to Polkinghorn's shaft, and hope to get it thoroughly ventilated by the end of the week. We have two men and two boys rising in the back of the adit, on Manby's lode, which is about 2 ft. wide, producing good work for tin, worth full 7l. per fm., and every indication of an improvement. The engineers and masons are getting on well with their work, and will, if weather permit, get all completed in a few days. The capstan is fixed, and everything ready to commence putting down the pitwork. We hope to get the engine to work in about a week from this time.

PEDN-AN-DREA UNITED.—W. Tregay, T. Delbridge, Jan. 10: Sump: The stope on the north side of shaft in the 120 is worth 20l. per solid fm.; lode now 12 ft. wide, and no north wall. The 120 east end is worth 40l. per fm. The 120 west end is worth 50l. per fm. The 110 east end produces stones of tin. The winze in the bottom of this level has been sinking on the south part of the lode, which has not been sufficiently drained to continue the sinking; this part of the lode is 12 ft. wide, and worth 60l. per fathom; the men here will now be set to stope towards the north part of the lode, which we believe to be better drained by the 120 east end, that end being driven on the north part of the lode; by this stope we expect to raise good quality tinstuff, and ultimately to facilitate the sinking. The 110 west end is worth 5l. per fm.; but as the stuff cannot well be got away from here until the skip is thrown to the 120, these men have been temporarily removed to the east and west ends of the latter level to facilitate operations there. The 100 east end is poor, but the lode is very kindly for the production of mineral. The winze in the bottom of this level is poor. The 100 west end is worth 5l. per fm. The 90 east is worth 12l. per fm. The 90 west, on engine lode, is worth 2l. per fm. The 90 west, on Martin's lode, is worth 3l. per fm. The 80 west is poor. The 55 west is poor.—Cobbler's: The 90 east end is not yet through the cross-course. The 68 west end is worth 7l. per fm.—Street and Bragg's: The 47 east end is worth 12l. per fathom. In the 40 east the lode is still unsettled. No other change to report.

PENDEEN CONSOLS.—J. Warren, Jan. 10: In the 142 north the lode is 2 ft. wide, a strong masterly lode, producing tin and copper, but not to value. In the 118 south we have been desuing the lode during the past week; in our next report we shall be able to give you its value. In the 106 south the lode is 2½ ft. wide, and of an improved quality. In the 82 north the water is still issuing from the lode in large quantities. In other parts of the mine there is no change to notice.

PENHALLS.—R. Pryor, sen., W. Higgins, Jan. 10: In the 40, east of engine-shaft, we have cut the cross-course to the east of which we have not as yet found the lode, it being heaved a little by the same. The lode in the 30 west, on flat course, is 18 inches wide, worth 6l. per fathom. The ground in the 30 cross-cut north is very considerably changed, being now strongly mineralised, as if nearing a lode or branch. The stopes in the 20 are still worth 17l. per fm. The lode in the 20, west of shaft, is worth 6l. per fm. We have still nine men engaged in cutting down the western shaft below the 30, which we hope to complete to the 40 in about five weeks from this time, after which we shall turn the flat-rods idle, and put as many pares of men as can come to work to complete the cutting down of this shaft from surface. The lode in the 40, west of cross-cut, is 1 ft. wide, worth 8l. per fm. The 40 cross-cut, south of this lode, is still letting out a large quantity of water, which we consider a good indication. Other places are without alteration since our last report.

PROSPER UNITED.—Thomas Richards, William Millitt, Wm. H. Martin, James Taylor, Jan. 13: Louisa's engine-shaft is sunk below the 60 fm. level 3 fms. 5 ft. 6 in., vertical from surface, but the men are now employed cutting down the south ground, to make it suitable for sinking on the south wall and line of the lode. The lode at the shaft is 5 to 6 ft. wide, containing copper ore, mixed with tin and mundic, worth for the length of the shaft 20l. per fm. It is intended, after the underlie shaft is cut down to bottom, to fix a 20-in. plunger-lift at the bottom of the perpendicular, and do away with the drawing-lift below the 30. The 60 is driven east of Louisa's engine-shaft 10 fms.; to commence from shaft the lode was 4 ft. wide, but in the present end the lode is only 6 in. wide, and poor for mineral. A cross-cut is driving north in the end to cut the cross-cut lode, which is under the elvan course, and in the level over it has a promising appearance for mineral. The 60 is driven west of the engine-shaft 14 fms. on the north part of the lode. We have had a productive lode for copper and tin until the last 3 or 4 ft.; the present end is worth 12l. per fm. There are two pitches working in back of this level, at 8s. tribute each. The 50 is driving east of engine-shaft, upon the cross-cut lode, where the lode is 3 ft. wide, worth 3l. per fm. for copper and tin ores. The 50 end is driven west of Louisa's engine-shaft, and holed to Hill's shaft, and the said end is extended west of the last-mentioned shaft 17 fms.; the first 7 fathoms the lode was small, since which we have had a lode from 3 to 5 ft. wide, opening tribute ground; the lode in the present end is worth 4l. per fm., principally tinstuff. In the 50 end, driving east of Hill's shaft, on the Louisa lode, the lode intersects the Moor lode, 12 fathoms east of Hill's shaft; the end is driven east of the junction 6 fms., and the lode varies from 2 to 4 ft. in width; in the present end it is 3 ft. wide, easy for breaking, and it is the most promosing level in the mine; end at present worth for copper and tin 10l. to 12l. per fm. This lode underlies north, whilst the Moor lode underlies south. We are driving a cross-cut south of Louisa's engine-shaft in the 60, and, provided it is cut productive, we may expect good and permanent results from this lode, because it stands in whole for a great extent throughout the mine. It is intended to rise above the 50 on a lode 3½ ft. wide, to prove its value, which can be done for 2l. per fm., and the result of this may induce us to cross-cut for the same lode in the 40, just over the present 50 end. The 40 is driven west of Hill's shaft, on the Moor lode, and holed to Hand's shaft; the lode is poor in the end. The 30 is driven west of Hand's shaft 34 fms., on a large promising lode at different points, and the intention is to drive towards Micheli's Rodney lode, and in doing which we shall intersect three lodes, known as Gwallon north lode, Middle lode, and Gwallon engine lode. The value of these lodes when intersected will, in our opinion, determine what deeper levels should be extended west of Hand's shaft; and, as our expectations have been high upon the value of the lodes in this part of the mine, we see no reason to alter our views. Hosking's engine-shaft is sinking below the 70, and the lode contains a little tin, but our object is to sink in this part of the mine, with the view of discovering a new shoot, or run, of mineral ground. In the 20, 30, 40, and 50 fm. levels the lode was highly productive, but the 60 and 70, so far extended west of Hosking's shaft, have not yielded near so much mineral, and for that reason we think depth is required to prove the lode. In the 60, east of Hosking's shaft, the end is poor at present. The lode in the 50 end, east of Hosking's shaft, is worth 7l. per fm. for tin; most of this level will be wrought by tributers. The 50 is driven west of Kendall's shaft, cross-cut upon the Louisa lode, and holed to Catherine's shaft; at present the end is in the cross-course, and when sufficiently clear of it, or in settled rock, it is intended to drive south and cut the lode west of the dislocation. We regret to observe that the general tutwork developments are not yielding so much mineral as at the time Capts. Thomas and Pascoe reported upon the mine; still there are points of interest in the mine, and we think a few months' development will lead to more productive results. Agreeable to our stock account of tin raised, we have now on the surface in stone, and at the stamps-floors in slimes and other work, 28 tons 2 cwts. 2 qrs. 14 lbs. (say) at 63l., 1772l. 5s. 4d. We consider there is broken of tinstuff, and not yet sampled, 300l. The copper ore broken, and not yet sampled, we value at 250l. There are about 55 tons of arsenic taken out of the flues, and, from its appearance, it ought to be the first quality. The burnt leavings containing copper, and sold the 8th inst., is the refuse from the calcining-house in the dressing of tin, and, although it is not a very high price, yet it assists to meet the expenses of dressing cost. There are about 70 tons more that we shall be able to sell when cleared of black tin. We purpose sampling our copper ore monthly; the next will take place the 27 inst. Our mines are in a good state of working, and, although the water is rather quick at this time, it must be remembered that we have had much rain, and the wet season will probably continue until the end of March next.

REDMOOR.—T. Taylor, Jan. 13: The ground in the cross-cut north is still hard, containing more spar than usual. The lode in back of the 30, on Johnson's, is about 18 in. wide, of a very promising character, worth about 7l. per fm.; I think it will improve. No alteration in any other part of the mine.

RIVER TAMAR.—J. Cock, Jan. 13: We have intersected a branch in the adit cross-cut 9 in. wide, composed of spar, mundic, and a little copper ore. It is important that this cross-cut should be pushed on, as there are strong indications of a successful result. The lode in the winze has a very promising appearance; the ground is tolerably good, but the water greatly impedes our progress.

ROARING WATER.—Capt. Thomas, Jan. 12: I was at the mine last Friday, and I now beg to offer the following remarks:—The rise from the contra adit on the Orchard lode is greatly improved in size and character. I have forwarded you a small box, which will enable you to judge of its nature, &c.; and my opinion is if you get the samples tested you will find them to contain a fair proportion of gold. The lode is 3 feet wide, composed of the richest description of gossan, friable quartz, and copper ore of good quality. As far as my judgment goes, I have seldom seen a lode that holds out such prospects of speedy success. I shall visit the mine again next week, when I will report further on the lode.

ROSEWALL HILL AND RANSOM UNITED.—E. Thomas, Jan. 14: The lode in the end and stopes, west of engine-shaft, is at present reduced in size and value, now worth about 30l. per fm.; the falling off in the value of the lode is caused by a horse of granite which is now in connection with it; but, judging from the appearance of the lode, together with the rich nature of the ground on either side, I am of opinion that the lode will soon be as valuable as hitherto. We have resumed driving the 140 west; the lode in this end is at present small, and not of much value. We have also commenced driving a cross-cut north at the 130, directly under the carbona which proved so rich in the 120, north of engine-shaft.—Ransom: The 120 ends, east and west of the Ransom shaft, are much the same as when last reported on. The 110 east is looking promising. The lode in the 80 east is worth 13l. per fm.; the stopes over this level are worth on an average 12l. per fm.; the stopes in bottom of this level are worth 16l. per fm. The lode in the 70 east is worth 6l. per fm. The 50 east is poor. The lode in the 40 east is worth 8l. per fm. The lode in the 30 east is worth 6l. per fm.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Jan. 17: The following tutwork bargains and tribute pitches were set on Saturday last:—Ellen's shaft to sink below the 50, by eight men, at 10l. per fathom.; the lode here has made a splice in the footwall, consequently it is not so rich for copper ore as it has been, now worth 20l. per fathom; this falling off in quality we believe is only temporary, created by the splice in the lode mentioned above. The 50 fm. level to drive east from Ellen's, by four men, at 40s. per fathom; the lode is 9 inches wide, producing stones of ore. The 40 fm. level to drive east of cross-course, by four men, at 40s. per fathom; in this end we have have intersected No. 2 cross-lode, about 8 fms. east of No. 1; here we would remark that between both the cross-lodes tribute ground has been laid open, which is now working at 8s. in 1l. The 30 fm. level to drive east of cross-course, by two men at 55s. per fathom; this end is at present poor. A cross-cut to drive south in the 40, east of Ellen's, by two men, at 45s. per fathom; here we have not cut any lode or branch as yet.—Tributes: No. 1 pitch

in back of the 50, west of Ellen's, set to four men, at 3s. in 1l. No. 2, in back of the same level, to four men, at 4s. in 1l. No. 3, also in back of the same level, east of Ellen's, to four men, at 7s. in 1l. No. 4, in back of the 40, west of Ellen's, to four men, at 6s. in 1l. No. 5, in back of the same level, east of Ellen's, to two men, at 12s. in 1l. No. 6, in back of the 30, east of Ellen's, to two men, at 12s. in 1l. Our sampling is on the 27th of this month; we think it will be equal in quality and quantity with the last.

ROSEWARNE UNITED.—E. Carthew, Jan. 15. In the 22, west of Pool's shaft, we are driving south by six men, to communicate with the new engine-shaft. In the adit end east, on Giesler's lode, it is 2 ft. wide, producing gossan and spots of copper ore. In the adit end, west of Dobel's shaft, the lode is 1 ft. wide, still yielding rich yellow and black copper ore. The new engine is sunk 12 fathoms.

ROYALTON.—T. Parkyn, Jan. 15: We are raising good work for tin, and are in a position to raise any quantity. Since I wrote you last there has been several mine agents and gentlemen here, and some of them have been underground, and I am glad to inform you that they are all highly pleased with our prospects, and that the lode is better than ever reported. One of these agents was Capt. John Simmonds, the Duchy agent, who carried away several solid stones of tin; he broke them out of the lode himself.

SILVER MOUNTAIN.—C. Williams, Jan. 12: In the west end of the deep adit level I have directed the men to drive east on the best portion we have cross-cut, and I glad to say the appearance of the lode is everything that could be wished, producing strings of ore 3 ft. in width, and I have every reason to believe that we are now entering into a profitable lode of ore. The lode in the bottom of Blue shaft is 12 ft. wide, composed of slate, spar, gossan, jack, and ore, yielding of the latter 3 tons per fm. I may remark that the ore now seems to be making more west under the adit level. The dressing is going on well, but the weather of late has been a little against us.

SILVER VEIN.—E. Burn, Jan. 15: The engine-shaft has been sunk about 6 feet during the past week; the lode is opening up large; it is at present 3 feet wide, composed principally of gossan, producing saving work for silver and copper. In the 20 end north the lode is small at present, about 1 ft. wide, unproductive; the ground still continues unsettled from the influence of the slide; I do not expect any improvement here before we get in more settled ground. In the stope north of shaft the lode is without any change since last report. We are getting on with clearing the 10 south, and shall complete it this week. The sinking of the shaft is proceeding with.

SORTRIDGE CONSOLS.—J. Richards, Jan. 15: In the 50, west of Mayne's cross-cut, on No. 2 south lode, the lode is worth ⅛ ton of ore per fm., and its promising appearance indicates an improvement. In the 50, west of the ventilating shaft, a cross-cut is being driven south for proof of size and character of the lode thought to be standing in that direction; the ground is easy for progress. In the 40, west of the engine-shaft, east of Rowe's cross-cut, on the north part of the lode, the lode is 1 ft. wide, and yields good stones of ore. In Gilbert's cross-cut north at the 40 east the ground continues favourable for progress. In the 40, west of Stancombe's cross-cut, on the south part of the main lode, the lode is 2 ft. wide, consisting of quartz, mundic, and stones of good quality ore. In a new, or Stancombe's rise, in the back of the 30, east of the eastern shaft, on the north part of the lode, the lode is small (6 in. wide), and for the present without ore. In the 30, west of the engine-shaft, on the main lode, the lode is of good size (4 ft. wide), and yields fine stones of ore.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 10: The ground in the 90 cross-cut north is still hard and spare for progress.

SOUTH CARN BREA.—T. Glanville, Jan. 10: Tutwork Setting: The flat-rod shaft to sink below the 96, by twelve men, at 40l. per fathom; lode worth 30l. per fathom. The new shaft to sink below the 88, by six men, at 13l. per fathom; lode worth 10l. per fathom. The 98 to drive west of the flat-rod shaft, by four men, at 12l. per fathom. The 98 to drive east of the flat-rod shaft, by six men, at 8l. 10s. per fathom. The winze to sink below the 88, by two men, at 9l. per fathom. The winze to sink below the 88, by six men, at 8l. per fathom. The 88 to drive east of the new shaft, by four men, at 6l. per fathom. The 78 to drive east of the new shaft, by two men, at 7l. per fathom. The 68 to drive east of the new shaft, by four men, at 6l. per fathom. The 68 cross-cut to drive north of the new shaft, by four men, at 14l. per fathom. The 58 to drive west of the rise, by four men, at 10l. per fathom. The 58 to drive west of the flat-rod shaft, by two men, at 10l. 10s. per fathom. The 58 cross-cut to drive north through the lode, by two men, at 7l. 10s. per fathom. The stopes in the back of the 68, by twelve men, at 4s. 6d. per ton; lode worth 10l. per fathom.

SOUTH CRENVER.—E. Chegwin, Jan. 13: In the 124, driving west of flat-rod shaft, the lode is 1½ ft. wide, producing 1½ ton of ore, worth about 9l. per fm., and the ground a little more favourable for driving. In the 124, driving east of flat-rod shaft, the lode is 1½ ft. wide, producing 1 ton of ore, worth about 4l. per fm.; the lode in this end is not looking so well. In the 105, driving east of flat-rod shaft, the lode is 2½ ft. wide, producing 2 tons of ore, worth 9l. per fm. In the 105, driving west of flat-rod shaft, the lode is 1¼ ft. wide, producing 1¼ ton of ore, worth 5l. 10s. per fm.; the lode in this end has improved in the past week. The tribute pitches are without change to notice.

SOUTH DARREN.—J. Boundy, Jan. 12: The lode in the 80, driving east of the engine-shaft, is 2½ ft. wide, consisting of clay-slate, copper, and lead ore; the value of the latter 6 cwts. per fm., a very promising lode for improvement. The lode in the 70 end east is 3 ft. wide, from which we have broken some good lumps of lead and copper ore during the past week; the end at this time present a very kindly appearance, and which I hope in a short time will turn out something good. The lode in the 60 end east is opening out large, and yielding some good work for lead, presenting altogether favourable indications of its soon becoming valuably productive. The lode in the 30, driving west of Air shaft, is 4 ft. wide, consisting of spar, copper, and lead ore; the value of the latter 13 cwts. per fm., and looking kindly to improve soon. Good progress is being made in sinking the winze from the 20 west over this point, the 30 west; no lode has been taken down in the winze. We have driven west about 9 ft. on the course of the lode below the pumping-wheel; the lode is 18 in. wide, consisting of a light clay-slate, spar, gossan, and spots of copper, as yet we have not seen any lead. There is no change to notice in any other part of the mine since my last report.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, Jan. 14: In the 50 east the lode has not been taken down since last reported on. The sinking of the flat-rod shaft is progressing satisfactorily; lode small. In the 12, east of shaft, the lode is nearly 1 ft. wide, at present unproductive. In the winze sinking under the adit the lode is 1½ ft. wide, producing stones of ore.

SOUTH EXMOUTH.—J. P. Nicholls, G. Maunder, Jan. 14: The west lode, in the 45 north, has improved since our last report; the end will now yield from 6 to 7 cwts. of lead per fm., and presenting such unmistakable indications as to warrant us to expect a much richer lode in this end shortly, more especially when we look at the improved character of the lode in the 30, just over this point, which continued 50 fathoms in length, throughout producing large lumps of lead. The winze referred to in our report of the 7th ult. is about 30 fms. in advance of the 45, and it is now sunk about 2½ fms.; the lode is much larger than the winze is wide; the part we are carrying is producing large stones of lead, which is finer grained, and we think richer for silver than what has been raised above the 30, and the lode appears to be improving as we gain depth. The 45 south, on west lode, is getting through the disordered ground, and we have a large lode coming in the end, so much so, that we have as yet seen but one wall, although the entire width of the end is in the lode; it so far contains spots of lead, but not enough to value; but, however, by its appearance we think it will soon improve. The two stopes working in back of this level are producing—No. 1, 1½ ton of lead per fm.; and No. 2, 15 cwts. per fm. There is no alteration worthy of remark in the 45 north, on east lode, since last report; the same will also apply to the 30 south. Nicholls's stope, in back of the 30, is yielding 1¼ ton of lead per fm.; Taylor's stope ¾ ton per fm. The engine-shaft is in regular course of sinking, the entire lift, 15 fms., being set on Saturday last at 13l. per fm., which will bring us to the 60, and which we calculate to reach in 18 weeks from the day of setting. All our surface operations are progressing satisfactorily.

SOUTH PHŒNIX.—Jas. Barkell, Jan. 14: The cross-cut going south at the 126 is still in elvan, as when last reported, but there is more water issuing from it; therefore I think we are getting very near the lode. We are through the hard bar of ground we had at the 100, and are now making good progress. No change worthy of notice in any other part of the mine.

SOUTH WHEAL TOLGUS.—Jan. 14: Youren's Lode: In Michell's engine-shaft, sinking below the 140, the lode is 15 in. wide, consisting of peach, mundic, and spar. The lode in the 140 west is 2½ feet wide, composed of killas, mundic, and spar. The ground in the 140, east of Michell's shaft, driving south on the cross-course, is moderately easy. The lode in the 130 west is 2 ft. wide, yielding 3 tons of ore per fm.—a good lode. In the 120 west the lode is small and unproductive. The lode in the winze sinking in the bottom of the 120 west, and in advance of the 130 end 10 ft., is yielding 3½ tons of ore per fm. In the 100 west the lode is 2 ft. wide, yielding 3 tons of ore per fm. The lode in the 100 west is small and unproductive. The same will apply to the lode in the 90 west. The lode in the 78 west is 15 in. wide, composed of spar, mundic, and peach. We have two stopes working in the bottom of the 120 west, by twelve men, each stope yielding 2½ tons of ore per fm.; and a stope in the bottom of the 100 west, by six men, which is yielding 3 tons of ore per fm.—South Lode: In the 130 east the lode is 3 ft. wide, producing good stones of ore. The lode in the 120 is 2 ft. wide, composed of spar and good stones of ore, and is promising for improvement. The same remark will apply to the lode in the 110 east, which has a good appearance. The lode in the 100 east is 2 ft. wide—unproductive. The stope in the bottom of the above-mentioned level is producing 3 tons of ore per fm.

ST. IVES WHEAL ALLEN.—H. Taylor, Jan. 10: The Carbona lode, south of the new shaft, is 2½ ft. wide, worth 20l. per fm. The lode in the winze sinking below the 20, east of Giesler's shaft, is 6 ft. wide, worth 8l. per fm. In the 20, east of Giesler's shaft, the lode is 7 ft. wide, worth 10l. per fm. In the 30, east of Giesler's shaft, the lode is 9 in. wide, worth 14l. per fm. The new shaft is not holed. We shall begin on Monday to fix stands for the whim and other works. Nothing else new.

— H. Taylor, Jan. 15: On the Carbona lode, south of Charles Frederick's shaft, the lode is 2½ ft. wide, worth 20l. per fm. In the 20, east of Giesler's flat-rod shaft, the lode is 7 ft. wide, worth 11l. per fm. In the winze sinking below the 20, east of Giesler's, the lode is 4 ft. wide, worth 9l. per fm. In the 30, east of Giesler's, the lode is 9 inches wide, worth 14l. per fm. We expect to hole Charles Fredericks shaft in the course of a few days. The tribute pitches are much the same as last reported.

ST. JUST UNITED.—John Carthew, Jan. 15: Since my last report we have been going ahead very well, both with our surface and underground work. The forking the water and clearing levels and shafts is proceeding most satisfactorily, and we are discovering a good quantity of tin ground, which will work on tribute as soon as the shafts are in order for drawing the tinstuff. I am glad to inform you that we have cleared the East Buck whim-shaft (which is about 300 fms. south-east from the engine-shaft) to the old men's bottom level, being 90 fms. from surface, or (as we had better reckon in future with all our levels from the adit, which is 50 fms. deep) 40 fms. below the adit: we have been into the levels, both east and west of the shaft, about 30 fms. each way; we shall lose no time in bringing the skip-road down, and clearing out this level, when, from what we have seen, I am convinced we shall open up a great quantity of tin ground, which will work at a good profit. In clearing the 20 fm. level, east from this shaft, we are also discovering good tin ground, which will pay well. We have two men driving the adit end east, and two men stoping over the level from this shaft,—a good paying lode, 18 inches wide. Oats's whim-shaft, about 200 fms. north-west from East Buck shaft, I hope to have cleared down to the 40 fm. level by the end of next week, and shall get down the skip-road with all dispatch, as not only in the clearing of the 20 fm. level and shaft we have a large quantity of tinstuff, but as soon as this work is complete we shall be able to set tribute pitches to work at 9s. in 1l. I recommend getting this shaft down with all speed to the 62, or deepest level, when I am convinced it will give good results. From the Red Dipper shaft we are extending the 30 fm. level east in a good course of tin, and the 30 west in good tin ground, but we shall in extending this end cut Wheal Owl and the Belian lodes, where there is no doubt we shall have good tin ground. We are still driving on the new lode west in good tin ground. On the whole, the mines are looking well.

TAMAR SILVER-LEAD.—T. Foot, Jan. 13: There is no alteration in either of the ends or winzes since my last report. The stopes in the back of the 226 fm. level (four in number) will produce on an average 12 cwts. each of lead per fathom. The three stopes in the 215 fm. level continue to yield on an average 8 cwts. each of lead per fathom. The stope in the 205 fm. level south is worth 9 cwts., and the stope in the 35 fm. level is worth 6 cwts. of lead per fathom.

TRELOWETH.—T. Richards, Jan. 15: The sinking of the engine-shaft continues in regular order. The 144 end east is not improved. The sump-winze below the 134 looks quite as good as we have had it, worth fully 20l. per fm. The 134 end east is worth 12l. per fm., and the ground continues easy. The rise above the 134, just behind the end, is worth 11l. per fm. The stopes east and west of the sump-winze are worth 9l. per fm. each. The pitches are not altered for the week.

TREVENEN AND TREMENHEERE.—M. Medlin, W. Tippett, Jan. 14: We sunk 3 feet below the 178 in the engine-shaft last week, where the lode still maintains its size and usual productiveness, but we are sorry to say that one of our boilers sprung a leak on Saturday, thereby causing a longer stop than usual; consequently, we have not forked the water since, but we are glad to say we expect to be in fork by this evening. The stopes in the bottom level are without change since last report. The 170 end west is looking more promising; the ground is eased, and lode worth 9l. per fathom. The back behind this end is worth 20l. per fathom. The 150 west end has also improved. The stope of ground in the end is about 4 feet high, and worth 6l. per fathom for 6 feet high. Tremenheere adit is without change since last week. This remark will apply to the tribute department. We are glad to inform you that the new or middle shaft is brought down to the 160, with the skip-road put in, &c. We shall begin now to take away some of the reserved ground at this level to drive the end west and sink the shaft, which will make an increase in our returns of tin, thereby enabling enabling us to make the necessary changes in tram-roads, skip-roads, plungers, &c., without calling on the adventurers for the means to do it.

TRIMLEY HALL.—Jan. 15: The ground in the cross-cut is composed of limestone, carbonate of lime, shale, and spar.

TRUMPET UNITED.—G. R. Odgers, Jan. 10: The lode in the engine-shaft, sinking below the 38, is 8 in. wide, producing occasionally good stones of tin, and the ground by the side of it is changing, hence we look upon this as a very important point. The lode in the 38 west is 10 in. wide, and worth 5l. per fm. The lode in the 25 west is small; this was precisely the same thing that we had immediately preceding the tin in the 15. The lode in the 15 west is producing some very good work for tin, and worth 8l. per fm. The lode in the stope above the 15 is also worth 8l. per fm. We are busy dressing, and we shall sell another parcel of tin on Wednesday.

TYDDYNGLWADIS (SILVER-LEAD AND GOLD).—Capt. Williams, Jan. 12: Adit: I am glad to report that the silver-lead still holds in our driving. We had a small blank, owing to the cross-course coming in, but now the lode is making regular and the ore improving; our driving in this (four miners) is 4 feet 2 in.—Adit Rise: The ore continues much the same as last reported, looking well; our progress here (two men) is 2 ft. 6 in.—Cwmheisian Isaf: Adit: Our progress in sinking (six miners) is 6 ft. 6 in.; the ground continues much the same, with 6 or 7 ins. of silver-lead on the footwall.—No. 2 Bridge Lode: We have a great improvement in our driving here, the lode being more compact, with well-defined walls, showing a good mixture of silver-lead, with indications of further improvement; we have driven on this (six miners and one labourer) 7 ft. The ore-dressing machine has been purchased by Mr. Mosheimer.

UNITED DOLFRWYNOGS (GOLD AND COPPER).—Capt. Williams, Jan. 12: Bog Shaft: Our progress in sinking (six miners and six labourers) has been 5 ft. 7 in. The ground is easier; the water much the same.—Doledd Mine—Gold Shaft: Our progress here has been slow, owing to the wetness of the season. The shaft is down about 8 ft.; the surface water is troublesome. The men are now employed in making a drain to take off the surface water. Timber is bought, and will soon be on the spot. Sawyers are making a sawpit.—Penbryn Mine: I advise this to be prosecuted with vigour.

UNITY.—Wm. H. Reynolds, Jan. 13: The plunger is fixed in the new shaft, and the men resumed sinking on a very promising lode, with a little copper ore through it. In the 75 north-west we have driven 6 fms. by the side of the caunter lode, and have now began to cut into it; when taken down last it had a very kindly appearance, with a little copper ore. Other parts are without any change of importance since last report.

VALE OF TOWY.—A. Waters, Thos. Harvey, Jan. 13: After carefully considering matters on Saturday last, we found we could not, with present staff, arrange to let both bottom ends, consequently we have commenced to drive the 124, south of Clay's engine-shaft, only; the lode here is 5 ft. wide, composed principally of sulphate of barytes, with spots of blende and copper ore in places; it is probable that we shall push forward to the intersection of the great cross-course, before we begin extending the level north of shaft. In the 70, north of slide, on Derrick lode, the ground is showing signs of water, and we hope soon to be through the dam and into the sparry part of the lode. In the 60, north of slide, the lode is from 4 to 5 ft. wide, carrying good ore stuff up and down the end. In the 50 north the lode looks exceedingly promising, and if the present condition of things continue we shall soon open a piece of profitable ground; this level, now commenced south of slide, is our first trial on the said lode in the direction named: the lode is 2½ ft. wide, yielding good saving work for lead ore. We have commenced a cross-cut at the 40 to cut Derrick lode at that level, which we expect to accomplish in about two months. We fully expect to find a bunch of ore there. In the adit level, south of Nant, the lode is 4 ft. wide, unproductive—ground hard. No change in the tribute department since Thursday last.

WENDRON CONSOLS.—Jan. 13: This mine has not, on the whole, looked quite so well as formerly, some of the pitches not having yielded as much tin, but we are glad to say an improvement has during the last fortnight taken place in several points. Bishop's shaft, sinking below the 62, is looking better. The 62 east end has improved. The stopes in the back of this level are turning out well. The 52, east of same shaft, has been rather poor for the last 10 fms., but the end is now worth 15l. per fm. Bal Dees part of the mine is beginning to look better, and it is likely ere long the returns will increase from this part of the mine, where a large outlay has been made to open up the old mine. Hill's part of the mine is looking better. Several tribute pitches are now set, varying from 7s. 6d. to 12s. in 1l. It is likely, on the whole, that the returns will increase.

WENTNOR.—J. Kemp, Jan. 15: We have found a great deal more work than I anticipated in repairing the western end of the 64; almost all the oldtimber was rotten, and had to be replaced with new; the lode in this level is 3 ft. wide, composed of spar and clay; the water is subsiding in the 92.

WEST BASSET.—Wm. Roberts, Jan. 14: In Grenville's engine-shaft the lode continues 3 feet wide, producing stones of ore. In the 114, driving east on the south part, the lode is 2 feet wide, producing 2 tons of ore per fathom. No other alteration to notice since last reported.

— 12·30 P.M.: In addition to the report written this morning, I beg to say that Capt. Pryor has now come up from underground with good stones of grey and crystallised ore, broken in the 104, west of Grenville's shaft; he says the lode is 2 ft. wide, very much improved since yesterday, and is promising for further improvement.

WEST DEVON.—J. Donnal, E. James, Jan. 14: The lode in the 50, east of south engine-shaft, still retains its size—from 2 to 3 ft. wide, producing good stones of ore occasionally, and looking very promising for a further improvement shortly; the water is issuing very strongly from this end. The lode in the stope in the bottom of the 40 is about 5 ft. wide, producing about 1½ ton of ore per fm.—a very promising lode. We are getting on with the dressing as fast as possible.

WEST GREAT WORK.—S. J. Reed, Jan. 12: Since my report presented to the shareholders at the meeting held on the 31st ult., no particular change has taken place in any of our operations, the lodes in the different ends being of the same size and value as there reported. The new shaft on Gregory's lode is being sunk with all speed, and daily expecting to communicate with the deep adit level.

WEST PAR CONSOLS.—W. Woolcock, Jan. 15: Saturday last was our monthly setting, but in consequence of the water being in at the bottom levels we have set but two bargains—to rise in the back of the 45, east of Dawke's shaft, by four men, at 4l. 5s. per fm., 1 fm. stent; the lode, which is 3 ft. wide, has been in a disordered state, but is now becoming more settled, and yields about 2 cwts. of tin to the 100 sacks. To drive the 30 end, east of same shaft, by four men, at 4l. per fm., 2 fms. stent; the lode is 3½ ft. wide, having a very kindly appearance, producing good saving work for tin, and looking well for further improvement. We have six tribute pitches working in the back and bottom of the 45, which I think will keep on the stamps until the water is in fork at the bottom level. We have decided on keeping the bottom lift to work while we haul tinstuff. The engine will just keep the water from rising, and when we stop hauling it will gain on it. We had a slight let this morning, otherwise the water would be 4 fms. below the 45.

WEST POLMEAR.—R. Hancock, W. Body, Jan. 14: The engine-shaft is sunk 14 fathoms 3 feet below the 20. We have put the men to drive east and west on the course of the lode. At this point the lode is about 1½ foot wide, producing some tin, but not rich at present. The No. 3 lode, in the end, is a foot wide, composed of spar, mundic, and peach, but poor for mineral. The ground in the north cross-cut at adit is easy for driving, and we hope to cut the first lode in about two months from this time.

WEST SHARP TOR.—Wm. Richards, Jan. 12: The 162 east has been driven 7 feet in the past week, and I am glad to say the ground continues equally favourable for progress: the part of the lode carried is 3 ft. wide, containing capel and quartz, spotted with mundic. The lode has been cut through by the No. 2 cross-cut in the 162 east, and found to be 30 ft. wide, the ground north of which is elvan, of a compact nature. The part of the lode being cut into in the No. 2 cross-cut, in the 162 west, is disordered at present by a patch of granite, but we expect to reach the leader part that was cut through at the shaft every cut we make. Water still issues very freely from the end.

WEST WHEAL TOLGUS.—Jan. 9: We have to-day completed taking down the lode in Taylor's engine-shaft, below the 52 fm. level; the part we are carrying is from 5 to 6 feet wide, and yielding fully 7 tons of ore per fathom for length of shaft (14 feet). How large the lode is we cannot say; the ore is of much better quality than when the lode was taken down last. We shall not take down the lode again for two or three week. Nothing new to report in the 52 fm. levels east or west.

WEST WHEAL TREVELYAN.—J. D. Osborn, Jan. 10: There is no alteration in the 58 cross-cut this week, as we have not yet cut the lode. Two stopes in back of the 58, west of Charles's shaft, are worth for copper ore 6l. per fm. each. The men are busily engaged in preparing the work for Charles's shaft underground and at surface. A stope in bottom of the 48, east of Charles's shaft, is worth 4l. per fathom. In driving east and west on Pryor's lode, in the 28, the lode is still disordered by a slide.

WHEAL AGAR.—W. Roberts, Jan. 14: No lode cut in the 100 cross-cut south; the water continues to flow freely from the end. In the 90 east the lode is 1 ft. wide, producing stones of ore; in the same level west the lode is small. In the 80, east of cross-cut, the lode is 2 ft. wide, producing 1 ton of ore per fm. In the 80, east of engine-shaft, the lode is 2 ft. wide, producing stones of ore. In the western engine-shaft the ground is easier than it has been, and the sinking is going on favourably.

WHEAL ARTHUR.—T. Carpenter, Jan. 15: Old Lode: There is no alteration at the engine-shaft since last week's report; the lode continues large, and yielding good stones of copper ore. We have cut through the cross-course in the 10 west, and find the lode, west of cross-course, 2½ ft. wide, yielding good stones of ore.—Edward Lode: The lode in the adit level east is 3 ft. wide, consisting of spar, mundic, and copper ore, but not to value. The lode in Prout's rise and stope, in back of the 50 east, is 3 ft. wide, worth 2 tons of copper ore per fathom. No alteration in any other part of the mine to notice.

WHEAL CREBOR.—Capt. Gifford, Jan. 16: No lode has been taken down at Cock's shaft this week, it being inconvenient to the men in sinking to do so. In the 72 east the lode is 2½ ft. wide, composed of capels and quartz, with stones of copper ore. No change in any other part of the mine. The tributers are getting wages.

WHEAL EDWARD.—G. Rowe, Jan. 10: Yesterday being our monthly setting-day, the following bargains were let:—The 92 to drive west, by six men, stent 1 fm., at 10l.; the lode is improving in size and character, being 3 ft. wide, and producing some good stones of ore, from which a considerable amount of water is issuing. The 81 west to drive by four men, stent 1 fm., at 8l.; the lode here is large, and carrying a leader part on the north wall, which is yielding 2 tons of ore per fm. The stopes in the back of this level, by four men, stent the month, at 4l. 5s. per fm.; the lode in this stope is large, producing 2 tons of ore per fathom. The 61 west to drive by two men, stent 1 fm., at 5l. 10s.; the same level east at 3l. 10s. per fm., stent to hole. The 50 west is for the time being suspended, and the men placed to put up a rise in back of the said level, where the lode is worth 12l. per fm. The stopes in the bottom of this level (the 50), by six men, stent the month, at 3l. 5s.; the lode in this stope is looking well, worth 15l. per fm. The cross-cut to drive south at the 50 east, by six men, stent 2 fathoms, at 8l. 10s. per fm. The rise in back of the 40 east, by four men, stent 1 fm., at 8l.; the lode here is principally composed of spar, gossan, and ore, worth 10l. per fm.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Jan. 10: The lode in the 120 west is 2 ft. wide, of peach, &c., with a little ore; this end is letting out a quantity of water, and presenting precisely the same appearance the 110 did immediately preceding the ore. The lode in the 110 west is from 15 to 18 in. wide, producing a little ore. At the 100 west, on the north side, we find the lode is looking better. The lode in the 90 west is 15 in. wide, and yielding full 1 ton per fm., opening good tribute ground. The lode in the 80 west is 15 in. wide, a good lode, worth better than 2 tons per fm. The branch in the 66 west is small, but producing some very good ore; the ground by the side of the lode is looking much the same as it does in the 80, and other levels, where the lode is productive. No alteration in the new lode since our last.

WHEAL GRYLLS.—E. Rogers, J. Pope, Jan. 15: Fisher's Lode: Annie's engine-shaft is sunk 3 fms. 1 ft. below the 30; the lode is worth 45l. per fathom for length of shaft (10 ft.) In the 30 end, east of this shaft, there is no alteration; the lode is worth 8l. per fm.; at this level, west of the flat-rod shaft, the lode is worth 8l. per fm. At the 30 fm. level cross-cut, south of the western shaft, the ground is favourable for driving.—Georgia Lode: The engine-shaft is down 1 fm. 1 ft. 6 in. below the 10. At the 10, driving north, the lode is worth 45l. per fm. In No. 1 stope, in the back of this level, the lode is worth 35l. per fm. In No. 2 stope the lode is worth 20l. per fm. At the 35, No. 1 stope is worth 20l. per fm.; and No. 2 stope, 12l. per fathom. At the 25, driving north, the lode is 1 ft. wide, composed of peach, prian, and mundic, with a small quantity of tin, but not enough to set a value on. In the rise in the back of this level the lode is worth 30l. per fathom.

WHEAL HARRIETT.—S. Williams, Jan. 10: The lode in the 115 end is getting more perpendicular, and letting out water, which I consider a good indication for tin; I am daily expecting a course of tin in this end. The lode in the winze continues worth 60l. per fm. The stope below the 100, which is 15 fms. west of the east winze, is worth 60l. per fm. We have commenced cutting down the ground in the skip-road in Alexander's shaft. The lode in bottom of the shaft is worth 15l. per fm. The lode in the adit east end is small, producing stones of ore. The stopes above the adit level continue of the same value as for several weeks past, about 8l. per fm. The ground in the adit north cross-cut is favourable for driving.

— Jan. 16: A telegram just received from Capt. S. Williams reports the lode in the 115 end to be worth 20l. per fathom.

WHEAL HARTLEY.—J. Vivian, P. Skewes, Jan. 9: We have driven the deep adit east about 12 fms. through a large lode, the exact size of which is not at present ascertained. We are carrying in the end from 3 to 4 ft. of the north part of it, which is composed of copper, blende, peach, and mundic; altogether a promising lode, and now letting out a large stream of water; we are pushing on this level to get under a shaft on the old adit, which is 18 fms. before and 16 fms. above us, and which we shall as soon as possible communicate with the present end. Our object thus being to get under the old workings on Wheal Pascoe, which are about 30 fms. east of the shaft referred to. Considering that much mineral was raised in Wheal Pascoe during the last working at shallow levels, and that our adit will come in at least 8 fathoms deeper than any point of their working, we may expect to meet with good ore ground. There being also a large cross-course a little to the east of us, we shall be in a position to intersect other lodes which traverse the sett both north and south of our present operations in a little time, and with a comparatively small outlay.

WHEAL HEARLE.—W. Wesley, Jan. 13: In the 122 south no change. In the 122 west the lode is 2 ft. wide, worth 5l. per fm. In the stopes in the back of this level the lode is worth 2l. per fm. In the 110 end the lode is small and poor; we think this end is gone through the western run of tin ground. In the 60 south we have good indications of the lode. There is no change in any other part of the mine.

WHEAL NORRIS.—J. Andrews, Jan. 10: At our setting to-day the following bargains were let:—The Cremorne engine-shaft to sink below the 35, by nine men, at 27l. per fm. The 35 cross-cut, south of said shaft, by six men, at 5l. per fm.; during the past week we have intersected two branches in this cross-cut—one 6 in. the other 9 in. wide, but I expect the main part of the lode is not yet reached. The 15 cross-cut, to drive south of ditto, by two men, at 9l. per fm. Carter's shaft to sink below the 25, by nine men, at 32l. per fm. The 25, to drive east of the said shaft, on the No. 4 lode, by four men, at 5l. per fm.; this lode in the end is 2¼ ft. wide, containing a leader on the footwall 9 in. wide, good work for tin, altogether presenting a very kindly appearance. The rise in the back of the 15, east of ditto, on No. 3 lode, let to four men, at 5l. 10s. per fm.; the lode in this rise is 1 ft. wide, and in the west end of it contains moderate quality tinstuff; nearer the cross-course it is poor.

WHEAL UNION.—T. Glanville, Jan. 9: Tutwork Setting: The 18 cross-cut to drive south on the cross-course, by four men, at 3l. 15s. per fm. The winze to sink below the 20, on the south lode, by four men, at 4l. 10s. per fm. The 20 to drive west of cross-cut, on the south lode, by four men, at 5l. 10s. per fm. The 18 to drive east of the eastern shaft, by two men, at 6l. per fm. The winze to sink under the 18, east of the eastern shaft, by four men, at 6l. per fm. The 30 cross-cut to drive south, by two men, at 9l. per fm. The plat to cut at the bottom of the flat-rod shaft, the shaft to case and divide from the 66 to the 76 fathom levels, and make complete for driving the level, by twelve men, at 30l. per bargain.

— Jan. 14: The flat-rod shaft is down 76 fathoms below the adit level. We are now cutting plat, and preparing to drive east and west on the course of the lode, which is 5 feet wide, composed of spar, mundic, copper, and tin ores. In the 18, east of the cross-course, the lode is 3 ft. wide, composed of gossan and stones of ore. In the winze below the 18 the lode is 6 feet wide, yielding stones of ore.

WHEAL UNY.—S. Conde, M. Rogers, Jan. 10: The lode in the 100, west of engine-shaft, is worth 15l. per fm. for tin. The lode in the 90, west of incline shaft, is worth 10l. per fm. The lode in the 80, west of incline shaft, is worth 5l. per fm. We expect to hole to the winze sinking below the 60 next week, when we shall be in a position to break a quantity of tinstuff from this point. The lode in the 80, east of engine-shaft, is worth 9l. per fm. The lode in the 60, west of incline shaft, is worth 10l. per fm. The copper lode in the 48, west of No. 3 shaft, is 9 in. wide, producing stones of copper ore, but not to value. The lode in the 58 west is 1 ft. wide, worth 5l. per fm., and kindly to improve. The lode in the 58 east is 18 inches wide, of a more promising appearance, worth 5l. per fm. for copper and tin.

WORVAS DOWNS.—R. Harry, Jan. 14: The lode in the stopes over the 60 east is worth 40l. per fm. The lode in the 40 west, on the caunter, is worth 20l. per fm. The carbona in the deep adit is looking well, improving and enlarging as we open on it, evidently one of the rich deposits so often found in this locality, and is worth 20l. per fm.

YARNER.—R. Barkell, Jan. 14: The engine-shaft is in full course of sinking below the 40; the ground is intermixed with mundic heads, which we think a favourable indication. The south cross-cut is extended 6 ft., and throughout the drivage branches of ore have been intersected, but we think we are through the lode, and now intend to drive on its course. In the eastern stope during this week we have had a hard floor of ground, which has disordered the lode a little, but to-day we find the lode is looking better again above the said floor, and the lode is worth 3 tons per fathom, which is also the amount per fathom the western stope is yielding. The 30 west, on north lode, is still poor, still there are signs of improvement. The lode is getting larger, and yielding stones of ore and mundic. Our sampling will be on the 29th inst., when we hope to get from 120 to 140 tons of copper ore.

ELY MERTHYR COLLIERY COMPANY.—The manager's report of the workings in this colliery is extremely satisfactory. Three of the best measures of coal of the well-known Rhondda Valley, consisting of the Hafod vein, the No. 3 Rhondda, and the celebrated Abergorky steam coal, are now opened sufficiently to be taken at once to market, as soon as the siding from the levels to the Ely Valley Railway is completed; and as a contractor has undertaken to effect this in one month from the present time, the quantity of coal that will be ready for delivery at Cardiff and Penarth may be expected to produce large weekly returns. Offers to enter into contracts for regular supplies of this coal from purchasers of undoubted standing have already been received to a greater extent than the company will be able to supply. The company have entered into an agreement for an adequate supply of coal-wagons, so that no impediment exists for the full development of this very valuable mineral property.

LOWER TALDRWS SLATE QUARRY.—Geo. L. Fuller, C.E., Jan. 13: As regards the works in progress, you will remember my having mentioned the end of the year as the time when I hoped the lift would be quite down to its proposed depth. I am glad to be able to report its now being so, and preparations are making for commencing the main working level, laying the lift timbers permanently, and adapted the engine-drum to the increased depth, &c. In the cross-cut (trial drift No. 2) commenced, as I have before mentioned, about 87 ft. from the entrance of the drift, there is now shown about 16 yards width of rock, all more or less workable; and for the latter 5 or 6 yards really excellent. I am still having this continued, and uncovering this width is being pushed forward. A large area (100 ft. by 25 ft.) of the grant, immediately adjoining the course of the vein, is now stripped of peat, in readiness to take the proposed buildings for its utilisation, and building materials, for these have been collected to some extent, the plans for the buildings are also arranged, but just at present these preparations are partially suspended, in order to free as many hands as possible for uncovering.

DON PEDRO NORTH DEY REY GOLD MINING COMPANY.

The directors of this company have just received the most satisfactory information from Brazil, to the effect that Capt. Treloar had succeeded in purchasing the valuable mining property upon which he reported before leaving England. Capt. Treloar in his report says:—

"The gold mine of Morro St. Anna forms a portion of the celebrated mountain or Serra da Stacoluni, in the province of Minas Geraes, and has produced more gold than any other locality in the empire of Brazil. The position of the mine, as regards supply of labour and provisions, is all that can be desired. The excavations and mode of drainage are of the rudest character, attributable to the want of knowledge in surveying and mapping. The pillars of lode alone left in the mine would, I believe, pay the purchase money. There are three auriferous lodes, or formations; two are jacotings, and the third is a rock formation; all three have yielded large quantities of gold, but the rock formation and jacotinga next to it have been the most productive. The face of the mountain is covered with canga, or a conglomeration of iron ores, about 4 ft. thick. This canga is auriferous, and will probably pay well for stamping,—indeed, it is not improbable that the whole of that portion of the mountain containing the rich lodes may pay well for working. The present proprietors have worked only on a small scale, and on account of safety and ignorance of surveying, they have confined their operations during the last three years to one "canudo," or expansion in the rock or quartz formation. The first year was devoted chiefly to preparatory work; but even in this period of three years they have a clear profit of 7000l.; of this the sum of 3600l. was realised in the twelve months ending March last.

"For the cost of 1370l. in twelve months, gold to the amount of 4980l. was raised, leaving thereby a profit of 3600l. Basing, then, the result of the following estimate upon the results of the rock formation, I believe the undermentioned returns will be safely obtained in the first three years:—Upon an outlay in the first year of 8500l. the produce will be 9971l., and the profit 1471l. In the second year, on an outlay of 12,942l. the produce will be 19,942l., and the profit 7000l. And in the third year, on an outlay of 14,930l. the produce will be 29,913l., and the profit 15,000l. I am of opinion that after the expiration of three years, if not before, the returns will equal, if they do not surpass, those of the celebrated mine from the St. John Del Rey Company. The above estimate is based solely upon the returns from the rock formation. Adding, then, to these the returns which may fairly be expected from the jacotinga formations, from the deposit in the valley, and from the fully opening out of the rock formation, and recollecting that the mine is situated on the south side of a mountain, where rich lodes are of manageable width, the wall pretty firm, drainage easy, the ore trammed out through carts to the surface, instead of being hauled up by expensive machinery

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WEST PAR.—The lode in the 30 east continues to improve, and is likely to be still better. The 45 yielded nearly 900*l.* worth of ore, and the ground is whole above that level, so that the new 30 fm. level is reasonably expected to discover good bunches of tin and copper. The sinking of the shaft on the course of the lode, from the 45 to the 80, is however, the most important object.

EAST JANE.—A sampling of 23 tons of silver-lead ore has again been made from this mine, and realised 13*l.* 13s. per ton. This makes 161 tons of lead ore which has been raised from the adit level and stopes.

SOUTH CROFTY.—A good improvement for copper ores has taken place in the engine-shaft.

ROARING WATER.—The lode recently discovered in the Orchard level, in this mine, is still further improved, being 3 ft. wide, composed of the richest description of gossan, friable quartz, and copper ore, of good quality. Specimens of this lode may be seen at the office. An assay is about to be made for gold, as a strong impression prevails that these rich and highly mineralised specimens contain a good proportion of the precious metal.

BRONFLOYD UNITED.—The balance-sheet to be submitted to the annual general meeting, on the 26th inst., shows:—

Balance in hand, Dec. 31, 1861	£ 849 11 11	
Produce of 235 tons lead ore	3148 3 9	= £3997 15 8
By expenditure for the year 1862		2595 14 9
Present balance, in cash and ore bills		£1402 0 11

A dividend of 650*l.* is proposed to be paid.

PROSPER UNITED.—We understand that the committee have appointed Mr. C. Wescomb, of Exeter, purser of these mines in place of Mr. Hosking, resigned, subject to the confirmation of a special general meeting, to be held in London on the 29th inst. Mr. Wescomb being well and favourably known as the purser of several important mines, we believe the committee could not have made a better selection, and one who is more likely to act strictly for the benefit of the shareholders, independent of all influences whatever.

CORNUBIA.—At the meeting, held on Thursday, it was thought a 10s. call would be made. The stamps have just been set to work.

NORTH TRESKERBY.—This mine is opening up one of the best dividend mines in the Redruth district. Highburrow shaft has very much improved; the lode is now worth fully 20*l.* per fm. The other parts of the mine are looking exceedingly well. The sampling on Wednesday last was 395 tons of improved quality ore. The quantity would have been larger had the weather been favourable for dressing it. The next meeting is on Feb. 10, when a dividend of 2s. per share will, no doubt, be declared.

EAST WHEAL AGAR.—The engine will go to work in about a fortnight's time. This mine adjoins South and West Caradon, and on the same lodes. Shares are in demand at 10*l.*, and must go higher.

HOLMBUSH.—At this mine the 160 west is improved, and, from some points to come off, it is more than probable that some good discoveries will be made.

WHEAL HARRIETT.—A very good improvement has been made in the stope adjoining the rich winze, now worth 50*l.* per fathom.

NORTH ROSKEAR.—At the meeting, on Tuesday last, a call of 25s. per share was made, to pay off a subsist advanced at different times, which has been accumulating for nearly 20 years past. Although the profit for the last two months has been about 300*l.*, the call will put the mine in a good position, and from the reports dividends may for the future be anticipated. The improvements are in the bottom of the mine. The winze below the 175 is valued at 175*l.* per fm.; the winze below the 184, 75*l.*; and the 184, 50*l.* per fm. These points will show that good ore ground is being laid open.

WHEAL SETON.—The lode in the winze below the 144 is not quite so large, but they have still a splendid course of ore.

EAST BROOKWOOD.—The greatest excitement has prevailed at Buckfastleigh in consequence of a valuable discovery at this mine. Capt. Williams is highly complimented upon his energy in bringing the mine to its present state; it will soon, it is said, enter the Dividend List.

WHEAL HARRIETT in the last six months has paid the cost, and laid open at least 10,000*l.* reserves.

At NORTH TRESKERBY an improvement has taken place in Highburrow shaft; a good copper lode has made its appearance, worth 20*l.* per fathom: 395 tons of ore have been sampled, and there would have been a great deal more but the continuous bad weather prevented it being dressed. Another sale of tin will take place on Thursday next, and the general meeting on Feb. 10, when a dividend will be declared. This mine pays dividends every two months.

WHEAL EMMA.—A cross-cut has been driven at the 34 fm. level, which has intersected the north part of the lode, from which they are raising some good ores; cross-cuts are being driven at other levels, when, if similar results are found, this mine will soon be placed in a much better position.

MARAZION AND BREAGE.—Mining in this district appears to be in a prosperous state. During the past week an important discovery has been made at Wheal Metal, in the 80 fm. level east. At Great Wheal Fortune the points present their usual productive appearance. The engine-house for the winding-machine is completed, and the engine will be erected without delay, so as to draw the full produce to surface (which cannot at present be done for want of it), and thereby increase the profits. This mine a short time since might have been considered one of the poorest in operation; but with perseverance it has attained its present position. Wheal Prosper appears to be improving in depth; the lode in the engine-shaft is becoming more productive for tin, and should it continue, which there is reason to believe it will, we may fairly calculate on having a profitable mine here soon. The Great Work Mine, which was so productive for many years, is likely again to resume its former position, the profits on the last three months' working being nearly 400*l.* Since the meeting operations have been commenced on two new lodes, by driving an end west on each of them, which is opening out excellent tin ground, that can be worked at a low tribute, and will assist materially in bringing the mine again to a speedy dividend state. A great outlay has been gone to in this mine since it ceased to pay dividends (the last three years) in removing some of the old and adding new machinery; but it is gratifying to know that the whole has been met by the returns, without calling on the shareholders to advance a shilling. At West Great Work the prospects are encouraging, and it is stated that an engine will shortly be erected. At East Gryills nothing is doing below the adit level, at which point some valuable tin ground is being laid open. There are a great many productive lodes in this sett, which are worthy of having an engine erected on them at once. Old Wheal Neptune engine will shortly be ready to work, after which sales of ore, without a doubt, will soon commence. This mine at the last working was very profitable, and, when we look at the different lodes in this sett unexplored, in addition to the main lode, which was the principal point of operation at the last working, we see a reasonable prospect of its becoming again a profitable mine. There is scarcely anything doing at Wheal Charlotte underground at present, the water preventing operations. The new engine will be ready for working in about a month, when the water will soon again be drained to the bottom, which is about 80 fms. below adit, and the engine-shaft pushed downward through the course of copper ore there standing. This mine, which paid dividends while the old machinery was of sufficient power to drain the water, is expected to do so again in a very short time after the new and more efficient engine is in operation. Wheal Gryils Mine, on the whole, is looking as well as ever. Annie's engine-shaft is worth 50*l.* per fathom; and many other points are opening out valuable tin ground. West Gryils is doing well for a young mine, and selling good parcels of tin. There are some other concerns to be soon started in the district (South Gryils amongst others), which are well spoken of, and from which good results can fairly be expected.—R. S. G.

The announcement of the TREGURTHA DOWNS AND OWEN VEAN COMPANY, which will be found to-day in our advertising columns, is regarded with much interest by the mining community of Cornwall, who are pleased to see so important and valuable a property started under such auspices. The high respectability and mining position of the parties concerned affords a certain guarantee of the prudent conduct of the enterprise, and as the property itself is admitted on all hands to be unsurpassed in the county, we may safely predict for the Tregurtha Downs Company a career of magnificent success.

TYWARNHAILE MINE.—The prospectus of this mine has attracted much attention, as was naturally expected it would do. At the mine the 90 fm. level east continues to improve, valued now at from 20*l.* to 30*l.* per fathom. Some of the pitches have improved, particularly the one in the back of the 80 fm. level.

STEAM ON COMMON ROADS.—Mr. Charles B. King, M.E. (of Abingdon-street, Westminster), a gentleman well known in connection with this branch of engineering, has recently designed a Traction Engine, which for simplicity and special adaptability to perform the functions of a heavy hauling engine is, we think, without an equal. The following is a brief and succinct description of the engine:—The boiler, which is constructed on the locomotive principle, is supported by a wrought-iron framing, which, working downwards, is fitted with horn plates, giving an outside bearing to the driving-wheels, which are 6 feet diameter and 14 in. wide; they are constructed of T-iron, with a cast-iron boss, from which round spokes proceed. Between the spokes an elastic medium is introduced between them and the tyres, to relieve the wheel from violent shocks, which are often met with when travelling on turnpike roads and paved streets. To each end of the engine are fixed transversely baulks of timber, to which are fixed buffers and drag chains. The length over all is 20 feet, and the extreme breadth 7 ft. The cylinders (which are 8 ft. diameter and 13 in. stroke) are fixed on brackets between the main framing and the boiler. The crank-shaft rotates in plummer blocks attached to the top side of the fire-box, immediately over the main driving-axle, which is geared by peculiarly shaped spur-wheels, having a proportion of 1 to 16. A large foot-plate, coke-boxes, and water-tank are disposed at the stern of the engine, so that the weight is well thrown over the driving-wheels. The centre of gravity is low, being only 2 ft. 8 in. from the ground. Steering is accomplished by means of a segmental wheel on the leading axle, and geared by worm-wheels to the back part of the engine, giving thereby instant communication between the engine-driver and steersman, who are not cramped for room, as in other arrangements of back steerage. The engine is designed to work at 60 lbs. pressure on the square inch, and will travel at from 6 to 7 miles an hour. This engine has been designed specially by Mr. Charles B. King, for some Russian merchants of Odessa, whither two will proceed in the course of a month, after undergoing some severe tests before shipment.

DEATHS FROM BLASTING.—At Tolcarne Mine, William Richards, 45, was killed by the explosion of a shot which had hung fire.—At Trumpet Consols, Thos. Pascoe, 22, met his death by a similar accident. Verdict in each case, "Accidental Death."

*** With this week's Journal a SUPPLEMENT SHEET is published, in which appears a Plan and Description of the Tregurtha Downs and Owen Vean Mining District—the Quarterly Sales of Copper Ores in Cornwall and Swansea—the Quarterly Sales of Black Tin and Lead—Foreign Mining and Metallurgy—Mining Photographs: the Mine Sale—Manufacture of Tea Lead—New Double-acting Pump—Concentrating Machine—Spill's Machine Belting, &c.

*** With the Journal of Dec. 20 was published a SUPPLEMENTAL SHEET, in which appears a Plan of the Walker Colliery, in explanation of the Remarks of Mr. Matthias Dunn respecting the late Explosion—the Inquest on the sufferers by the Edmund's Main Colliery Explosion—Progress of Mining on the Pacific Coast—the Mineral Resources of the Territories of the United States—Foreign Mining and Metallurgy—North of England Institute of Engineers—Meeting of Companies: West Caradon, Trevenen and Tremenheere, Great Wheal Vor, Wheal Union, Great South Tolgus, and Amman Coal Company—Mining Photographs, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, Jan. 16, 1863.

COPPER.	£ s. d.	
Best selected....p. ton	101 0 0-	—
Tough cake..... „	98 0 0-	—
Tile ..... „	98 0 0-	—
Burra Burra .... „	98 0 0-99	0 0
Copiapo ..... „	— -	—
Copper wire .....p. lb.	0 1 1¼	—
ditto tubes ..... „	0 1 1-	—
Sheathing & bolts p.ton	105 0 0-	—
Bottoms ..... „	110 0 0-	—
Old (Exchange) .... „	91 0 0-	—

IRON.	Per Ton.	
Bars, Welsh, in London..	6 10 0-	—
Ditto, to arrive	6 10 0-	6 15 0
Nail rods	7 0 0-	—
„ Stafford. in London	7 10 0-	—
Bars ditto	7 5 0-	8 0 0
Hoops ditto	8 7 6-	8 10 0
Sheets, single	9 5 0-	9 15 0
Pig, No. 1, in Wales ..	3 10 0-	4 0 0
Refined metal, ditto....	4 0 0-	5 0 0
Bars, common, ditto....	5 15 0-	—
Ditto, merchant, in Tees	6 10 0-	—
Ditto, railway, in Wales	5 12 6-	5 15 0
Ditto, Swed. in London.	11 10 0-	12 10 0
To arrive	11 15 0-	12 10 0
Pig, No. 1, in Clyde....	2 15 6-	2 18 0
Ditto, f.o.b. in Tees ..	2 8 0-	2 10 0
Ditto, forge, f.o.b. in Tees	2 5 0-	—
Staffordshire Forge Pig.	— -	—
Welsh Forge Pig	— -	—

LEAD.		
English Pig	21 10 0-22	5 0
Ditto sheet	21 15 0-22	0 0
Ditto red lead	22 15 0-23	0 0
Ditto white	28 10 0-30	0 0
Ditto patent shot	23 0 0-23	10 0
Spanish	21 0 0-	—

BRASS.	Per. lb.
Sheets	10¼d.- —
Wire	9¼d.-10d.
Tubes	11¼d.-12½d.

FOREIGN STEEL.	Per Ton.	
Swedish, in kegs (rolled)	15 0 0-15	10 0
„ (hammered).	15 10 0-16	0 0
Ditto, in faggots	16 10 0-18	0 0
English, Spring	18 0 0-23	0 0
Bessemer's, Engineers Tool	44 0 0-	—
„ Spindle	30 0 0-	—
QUICKSILVER	7 0 0	p. bottle

SPELTER.	Per Ton.	
Foreign	18 5 0-	—
To arrive	18 5 0-	—

ZINC.		
In sheets	23 5 0-23	10 0

TIN.		
English, blocks	115 0 0-	—
Ditto, Bars (in barrels)..	116 0 0-	—
Ditto, Refined	120 0 0-	—
Banca	119 0 0-	nom.
Straits	117 0 0-	—

TIN-PLATES.*		
IC Charcoal, 1st qua. p. bx.	1 8 0-	1 8 6
IX Ditto 1st quality „	1 14 0-	1 14 6
IC Ditto 2d quality „	1 4 6-	1 6 0
IX Ditto 2d quality „	1 10 0-	1 12 6
IC Coke ..... „	1 2 6-	1 3 0
IX Ditto..... „	1 8 6-	1 9 0
Canada plates ....p. ton	12 10 0-	13 0 0

In London; 20s. less at the works.

Yellow Metal Sheathing .p. lb.	8¾d.-9¼d.
Sheets .....p. lb.	8d.-9¼d.
Indian Charcoal Pigs in London	6 12 6- 6 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The Metal Market continues dull, and undisturbed by any speculative feeling. The business now doing is for the most part limited to the execution of shipping orders given out by merchants from time to time on the arrival of the various foreign mails bringing them in; but these orders run very small, and are insufficient to impart any appearance of activity to the market. Holders and sellers, however, adhere with tolerable steadiness to current rates, and would seem to have confidence in the ultimate improvement of metals. The advance in the Bank rate of discount may tend rather to weaken the market.

COPPER.—In English manufactured there is no change to notice; orders are scarce, and can be readily placed under fixed rates—say at about 10¾d. For tough ingot there is rather more enquiry, and contracts passed at about 96*l.* Other descriptions of unwrought without improvement. Foreign extremely quiet. Burra Burra, 98*l.* to 99*l.*; Kapunda, 98*l.*; Chili, 87*l.*; Spanish, 88*l.* to 89*l.*

YELLOW METAL.—Braziery sheets only realise 8d. to 8¼d.; sheathing a fraction more—very dull market.

IRON.—In railway bars manufacturers are fairly supplied with orders; selling price not above 5*l.* 12s. 6d. at the works. Merchant bars are less in demand, and purchasable at 5*l.* 15s. to 6*l.*; at the works, 6*l.* 10s., delivered f.o.b. in London. Staffordshire makes in good ordinary request, at full rates. Manufacturers mostly fairly off for orders. Swedish bars are rather looking up, though the demand is anything but excessive. The increased firmness may be attributed to the small stock and the difficulty of buying for arrival. Good Indian specifications held for 11*l.* 10s. to 11*l.* 15s. In Scotch pigs the highest point touched during the week was 55s. 6d.; lowest, 54s. 3d.; market closing, buyers, 54s. 7½d.; sellers, 54s. 9d., mixed numbers.

SPELTER.—The market for this metal is firm, at 18*l.* 2s. 6d. to 18*l.* 5s., although very quiet; sales reported during the week about 150 tons.

ZINC very steady, at 23*l.* 5s.

LEAD.—English pig in moderate request, at 21*l.* 10s. for ordinary soft quality, and 22*l.* to 22*l.* 5s. for WB. Other kinds remain without material alteration. Pipe in rather better demand, at 22*l.* 5s. to 22*l.* 10s.; red, 22*l.* 5s.; Spanish pig, 21*l.*

TIN.—English is still obtainable at about 30s. per ton under fixed rates—demand very limited. In foreign, Straits has sold at 117*l.* cash, and 118*l.* three months; Banca, 119*l.* nominal.

TIN-PLATES rather more enquired for; makers quote IC coke, 22s. 6d. to 23s. Special brands are held for 24s. Large purchases effected lately both in coke and charcoal.

STEEL.—Swedes held firmly for 16*l.* keg; 17*l.* faggot. Some holders not in the market at these rates.

NEW YORK, DEC. 31.—With respect to the position of the Metal Trade at New York, at the close of the year, Messrs. Winterhoff and Co. report that since their last business has been very quiet. Congress has not yet acted upon the financial projects submitted by the Administration, and this is the main cause of the dulness; prices, however, have given way but little during five weeks of inactivity. Money is easy, under the general impression that no other course is open to the Secretary of the Treasury but to issue more paper currency. The last half of 1862 offers a favourable contrast to the preceding twelve months. The stocks of merchandise on hand are not large, and the importations are at present limited. The moment the financial question is settled a good business is looked for. The quotations for tin to-day (Dec. 31) are—Straits, 40 cents; Banca, 42; English 38¼. The total stock in first hands in Boston and New York is 37,400 slabs, against 21,300 slabs in Dec. 31, 1861, and 29,500 slabs on Dec. 31, 1860. The price has varied from 28 to 40¼ cents, and is far higher than the average of former years. The importations of English tin have been larger than formerly, and the duty of 10 per cent. in its favour against an importation of Straits and Banca from Europe, may increase the consumption of this kind, but so far it has not been in favour. Banca is still exclusively used by some manufacturers. About 500 tons of Silesian and Lehigh spelter were bought up during the last two weeks at 7¼ to 7¼ cents, the latter being to-day's quotation. The stock of foreign in first hands is 150 tons, against 1300 tons on Dec. 31, 1861. The domestic production is estimated at 1600 tons, and the consumption at about 4000 tons, against an average of 4500 tons in former years. Copper has been more affected by the general dulness than the other metals, and has declined to 31 cents, with a steady business for consumption. The details of the annual production of the Lake mines have not been received. The yield will probably be about 7400 tons of ingot copper, of which nearly 6000 tons have come East. Whilst the larger companies show a falling off, several of the smaller have improved. With regard to the future, a great deal will depend upon the ability of the companies to obtain labour. Lead has been very dull, and the sales of the last four weeks do not exceed 600 tons of foreign, one-half of which was sold for export to China. The importations of foreign lead for 1862 are estimated at 36,200 tons, against 5700 in the preceding year. The total deliveries for consumption are estimated at 35,800 tons, against 15,000 in 1861, and an average of 22,000 tons previously. The increase in the consumption is, of course, mainly for Government purposes. The white lead trade suffered severely in the early part of the year, but improved a great deal towards the autumn. The supply for the moment is ample.

NEW YORK, DEC. 24.—The demand for coal has been quite brisk for foreign, but the supply is not large, and prices tend upwards; the sales include 536 tons Scotch splinth afloat, and 100 ditto from store, at $7, cash, and 400 Welsh steam, to arrive, on private terms. Domestic is freely offered, and the market is heavy at $7 to $8·50—the supply is fair; the sale of 25,000 tons Scranton, announced per auction on Tuesday, was postponed, owing to strike among the miners in Pennsylvania. The market for all descriptions of iron is very quiet, as usual at this season, but there is no stock of moment of either foreign or domestic brands of any kind in this or any of the markets of the country at present, and prices, therefore, rule firmly; sales of 250 tons, in lots, Scotch pig at $33 to $33·50. We quote the market firm at $30 to $34 for Nos. 3, 2, and 1, American pig; $67·50 for common English bars; $77·5 for refined ditto; 16½ c. to 17 c. for Russia sheet, 5 c. and 6 c. for English ditto; the latter are very scarce, particularly light numbers.

BOSTON, DEC. 22.—Picton and Sydney Coal are nominally the same as last noticed. No sales. Anthracite has been in steady retail demand at $9 per ton. Pig-iron is firm, with a moderate demand. The sales of Scotch, Gartsherrie, and other brands, No. 1, have been at $36 to $37·50 per ton, cash and six months. American pig is selling at $36 to $37 per ton, cash and six months. Bar-iron is firm, but the sales are only in small lots. Russia sheet-iron is quiet.

The fact of the Bank of England having raised the rate of discount this week to 4 per cent. will be regarded with great satisfaction by those who have viewed with alarm the extraordinary increase of late in new companies, which, while they absorb a large amount of capital, and enrich the promoters, must, for the most part, end in disappointment and loss to the shareholders. The settlement of the fortnightly account in the MINING MARKET, on Thursday, was the heaviest on record, and put a stop to dealing for a time; but, on the whole, during the week a steady demand on the part of the public for good mines has been kept up, and a very large amount of business transacted, particularly in North Roskear, East Caradon, Wheal Seton, Grambler and St. Aubyn, Marke Valley, Gonamena, Carn Camborne, Wheal Harriett, Wheal Kitty (St. Agnes), North Dolcoath, Wheal Crebor, East Grenville, Wheal Grenville, Ludcott, South Tolgus, West Tolgus, Providence Mines, Wheal Uny, Wheal Union, Pendeen, Pollard, Cook's Kitchen, East Russell, Hingston Down, North Downs, North Treskerby, Trumpet United, South Crofty, South Herodsfoot, and a few other mines. East Caradons have been pretty firm; on Tuesday, however, they suddenly declined 1*l.* per share, but soon rallied again. On Thursday, opened flat at 45¾ to 45¾, and then improved. On Friday, opened at 46¼, and in the afternoon suddenly rose to 47¾, 48¼, on a report in the market of some discovery in the mine, of which, however, we have no official notice. The report states, the 50 east, on the caunter lode, has improved to 70*l.* per fm.; the 60 east, 20*l.*; the 70 east, 40*l.*; the 70 west, 30*l.* to 35*l.*—New lode: The 60 east, worth 25*l.*; the 70 east, 30*l.*; the 70 west, 30*l.* Cargoll, 42 to 44; Carn Camborne, 15s. to 17s.; Condurrow, 95 to 105. North Roskear shares have been very largely dealt in, and leave of 64¾ to 65¼; at the meeting, on Tuesday, the accounts showed a profit on the two months' working of 182*l.* 7s. 10d., and after charging up an old "subsist" account of 105*l.* 8s. 1d., there was a balance against the company of 87*l.* 0s. 3d., to pay off which a call of 1*l.* 5s. per share was made. The ores sold in two months realised 316*l.* 3s. 2d.; and the agents calculate the sales for the next two months at 330*l.* which will leave a profit. In the Copper Mine the 184, west of Pearce's shaft, is worth 50*l.* per fm.; the winze below this level, 75*l.* per fm.; the stope in back of the 184, 65*l.* per fm.; the winze sinking under the 174, 75*l.* per fm. Here a rich mine has been opened out, and if our readers will refer to our article of Feb. 6, 1862, not quite twelve months ago, they will find these observations:—"Some time ago we stated there were one or two points of great interest in this mine, and as one of them appears to be near at hand, we may now refer to it more particularly. About two years ago a fine course of copper ore was met with in Pearce's shaft. This shaft, however, is a long way west of Doctor's, or engine-shaft, and the water prevented the ore being worked below the 174, to which level it continued rich. To drain it, therefore, the 184 has been for many months driving west to get under Pearce's shaft, and is now within about 6 fms. of it. This end, it will be observed, has been for some fathoms in an an improving lode, worth 2 tons of ore, or 20*l.* per fathom, and in a few feet more will drain Pearce's shaft, which can then be sunk in a good course of ore, from the 174 to the 184, and levels extended west also upon it, and opening out, as it were, a new mine, as the western ground is entirely unworked, and adjoins West Seton and New Seton." At the time we wrote this shares were 23*l.* each, and the report now issued to the shareholders more than confirms everything we wrote. Clifford Amalgamated, 19 to 21; Cook's Kitchen, 31¼ to 32¼; Copper Hill, 70 to 75; East Basset, 53 to 55. Calvadnack, 6 to 6¼. A circular has been issued to the shareholders to inform them that in driving the 40 cross-cut, south of the engine lode, the old workings of Balmenen Mine had been unexpectedly cut into, and a large quantity of water flowed into the mine from them, and this will lessen the returns of tin by 5 or 6 tons. The mine, however, altogether, is looking better than for some time past, and the cutting of the Balmenen lode gives it an additional prospective value. East Carn Brea, 11¼ to 11¾. Wheal Harrietts have advanced to, 4¼ to 4¾; the mine is looking well, and during the past six months, we are informed, has not only paid its cost, but added 10,000*l.* to the reserves of ore; the winze sinking below the 100 is now down nearly 12 fms., worth 60*l.* per fathom; the stope, 15 fms. west of this point, is worth 60*l.* per fathom; the lode in Alexander's shaft is worth 15*l.* per fathom, and worked at 50s. per fathom; the lode in the 115 end is worth 20*l.* per fathom. East Rosewarne, 3¼ to 3¾. East Russells advanced to 4¼, but declined to 3¾, and then left off 3⅞ to 4⅛. Wheal Setons have again become in demand, and advanced to 260 to 270. Gonamena in request at 2⅞ to 2¾. Grambler and St. Aubyn advanced to 24, buyers, and then declined, and leave off 19 to 21; we hear of no change to account for the fall. Great South Tolgus have declined to 6¼ to 6¾. Great Wheal Fortunes have been in good demand, and leave off 32 to 33. Herodsfoot, 49 to 51; Hingston Down, 3 to 3¼. Wheal Kitty (St. Agnes) have been largely dealt in, and leave off 3⅝ to 3⅞; the mine makes a profit of 553*l.* 4s. 5d. on the quarter, the returns being 2961*l.* 8s. against a cost of 2408*l.* 3s. 7d.; the report values the ends in the aggregate at 97*l.* per fathom. Marke Valley have been more in demand, and leave off 8⅞ to 9¼. New Seton, 150 to 155; North Basset, 2¾ to 3; North Crofty, 5 to 5¼. North Dolcoaths are becoming in demand at 1¾ to 2; the mine has good points to come off, and may have a rise. North Downs have been in request at 2⅝ to 2¾. North Treskerbys have advanced to, 4⅛ to 4¾; the mine is said to be looking better in bottom levels. Pendeen, 5¼ to 6; Providence Mines, 42 to 44; South Caradon, 390 to 400; South Crofty, 29 to 31; South Frances, 85 to 90. South Herodsfoot, 4¾ to 5¼; call of 12s. 6d. per share paid; at the meeting the accounts showed liabilities over assets of 182*l.* 2s. 3d.; the report of this mine was very satisfactory.

Wheal Grenville, 4¾ to 5; the lode in the 120 west is 2 feet wide, and presenting the same appearances as did the 110 just before coming into the ore. East Grenville, 49s. to 51s. Wheal Ludcotts have declined to 8¾, 9¼; South Tolgus, 46 to 48. Stray Park, 37½ to 38½, and firmer. Tincroft, 13 to 13½; Wheal Ludcott, 9 to 9¼; Tolcarne, 2¼ to 2½; Tolvadden, 3¼ to 3½. Trumpet United, 10s. to 12s.; the call of 2s. per share paid. West Polmear, 2s. 6d. to 5s.; the engine-shaft is sunk 14 fms. below the 20, and in driving east and west on the course of the lode, which is 1½ foot wide, producing tin, but not rich at present. Wendron Consols, 10½ to 11. West Caradon more in demand, at 32½ to 35. West Frances, 12 to 14. Wheal Crebor have been largely dealt in, but leave off flatter, at 17s. 6d. to 18s. 6d.; next week the lode will be taken down again in the shaft, and if improved there may be another rise. West Tolgus, 61 to 63; West Trevelyan, 8s. to 10s.; Wheal Margaret, 41 to 43; Wheal Mary Ann, 16 to 17; Wheal Seton, 260 to 270; Wheal Trelawny, 17¼ to 18½; Wheal Union, 5⅞ to 6¼; Wheal Uny, 7¼ to 7⅞. Wheal Pollard, 13s. to 15s., the call of 3s. per share paid; the agent's report to the meeting was of a very encouraging character, and after 20 years' experience of this district, he asserts that, from the indications presented, the mine may safely be classed with the best speculations in the district.

We observe that a company has been registered, with a capital of 2000*l.*, under the name of the Cape of Good Hope Copper Mining Company (Limited), on January 6. This is not the company which has purchased Messrs. Phillips, King, and Co.'s property at the Cape of Good Hope, and whose prospectus was issued on Dec. 12, and published in the *Mining Journal* on the 27th. This company has a capital of 150,000*l.*, and is brought out under the respectable management of Messrs. John Taylor and Sons. It may be necessary for this company to alter its name in consequence of this circumstance. This will, probably, delay the allotment for a day or two.

The prospectus of the Continental Bank Corporation, to be registered under the Companies Act, 1862, has just been issued, and is published in another column of this day's Journal. The capital has been fixed at 100,000*l.*, in shares of 100*l.* each, one-half of which is to form the first issue. The object of the Continental Bank Corporation is to facilitate the commercial and financial business between the United Kingdom and the European continent, and to carry out, on an extensive scale, operations in bullion and exchange; and it is confidently anticipated that, by extending to importers and exporters accommodation on an enlightened and liberal scale, a large proportion of such business will be secured to the present undertaking. The board of direction comprises a list of names of which any undertaking might well be proud.

On the Stock Exchange there has been a steady demand for Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Cambrian, 1¼, 1½; East Basset, 53¾, 54; Great South Tolgus, 6¼, 6⅞, 6¾; North Wheal Basset, 3, 3⅛; North Wheal Crofty, 5, 5⅛; East Caradon, 45½, 45¾, 46¼, 46⅜; East Carn Brea

11½, 11¼; Grambler, 19¼; Wheal Ludcott, 9½, 8¾, 8¾, 9; Wheal Seton, 237½, 245; Clifford, 20; East Wheal Russell, 3⅞, 3¾, 4; Hingston Down, 2¾; Tincroft, 13, 13½. In Colonial Mining Shares the prices were:—Port Phillip, 1¼, 1⅛; Scottish Australian, 1½, 1⅜; Yudanamutana, 3½, 3¾, 3⅞; Kapunda, 1½, 1⅛, 1; Great Northern of South Australia, ⅛, ¼. In Foreign Mining Shares the prices were:—Fortuna, 4⅜, 4½, 4⅜; Montes Aureos, 2¾, 2⅞; St. John del Rey, 56½, 55½, 56½; United Mexican, 5½, 5⅜; East del Rey, 1¾.

The closing quotations for shares in new undertakings were:—English and Irish Bank, ¼ dis. to par; Bank of Scinde, Punjaub, and Delhi, ¼ to par; Bristol and South Wales Zinc Smelting, ¼, 1 prem.; Cannes Hotel, ¼, ¾ prem.; British and Foreign Marine Insurance, 1¼, 1½ prem.; Continental Bank Corporation, ½, 1 prem.; Société Financière of Egypt, ¼, ¾ prem.; Trust and Agency of South Africa, ¾, ¼ prem.; and City of London Fire and Life Insurance, ¼, 1 prem. Vigra and Clogau shares closed at 29, 31; East Clogau, par to ¼ prem.; West Clogau, ¼ dis. to par; St. David's, ¼ dis. to ¼ prem.; Sovereign, ¼ dis. to ¼ prem.; St. Cuthbert's, ¼, ¾ prem.; Nova Scotia, ⅜, ¼ dis.; Ramsey Lead Mining and Smelting Company, ¼, ¼ prem.; Don Pedro North del Rey, par to ¼ prem.; Dolfrwynog, par to ¼ prem.; and East Cambrian, par to ¼ prem.

IRISH MINE SHARE MARKET.—Shares in banks, steam navigation, and railways have all been rather flat. Grand Canal alone made an exception by a rise from 37*l.* 5s. to 38*l.* 5s., 38*l.* 10s. Shares in mines have been largely dealt in, and Wicklow Copper shares, which we have recommended for several months past as a safe investment, have made a further advance of 10s. per share on last quotation of 39*l.* 10s., and are in request at 40*l.* (5*l.* paid). Connorree shares fluctuated from 21s. to 20s., 19s. 6d., and 19s. 9d., but the demand is fully equal to the supply of shares. Carysfort shares (1*l.* paid) were weaker, and realised only 19s. 6d. Fully paid-up shares were in request, but not obtainable under a considerable advance on last week's price of 40s. General Mining Company for Ireland shares (4*l.* paid) are slightly better, and have realised from 5*l.* 2s. 6d. to 5*l.* 5s. Carbery (Gurtavallig, county Cork) and Castleward shares (county Down) are again without a price. Mining Company of Ireland shares have been in much request, although they are now sold (ex dividend). They gradually rose from 19*l.* 12s. 6d. to 19*l.* 17s. 6d. (ex div.), and closed in demand. The county Wicklow, particularly the Vale of Ovoca, the richest mining district of Ireland, and one of the most important in Great Britain, is greatly interested in the progress of the Dublin, Wicklow, and Wexford Extension Railway, wherefore we quote from Mr. Le Zana's (the company's engineer) report for the shareholders at their meeting, to be held in Dublin on Feb. 2, the following:—

The heavy rock cuttings between Rathdrum and Arklow are almost complete; the arching of the Upper Rathdrum Viaduct is finished, and that of the lower one is in progress; the excavation of the three tunnels is complete; three miles of permanent way are laid between Rathdrum and Newbridge; and the contractor is laying the permanent way at Arklow. I expect the line to be ready for opening to Newbridge (Vale of Ovoca) early in April next. This will give railway communication to the whole of the mineral district. Between Newbridge and Enniscorthy very good progress has been made with the works. A great deal of masonry and a large portion of the earthworks have been executed; and, as the works between Arklow and Gorey are not heavy, and those between Gorey and Enniscorthy are remarkably light, I see no reason why the line should not be opened the entire way to Enniscorthy early next autumn. About 1400 men and 200 horses are at present employed on the line. The permanent way and works of your original line, and of the part of the extension which is open, have been maintain in good order. The siding to the jetty at Kingstown is in course of construction, and will shortly be complete.

Drawing the immense mineral produce of the several mines of the county Wicklow to the famous and splendid harbour of Kingstown will not only add very largely to the revenue of the line, but also greatly benefit the mines, as the total expense for transit of the ores to England will be considerably reduced, in consequence of the much greater safety and facility with which vessels of any size will be able to ship and carry the ores across the Channel. Hitherto the Port of Arklow has been nearly the only outlet for the Ovoca ores, and, although much improved within the last few years, will yet continue inconvenient for return cargoes, and dangerous in stormy weather, on account of the extensive sand bank outside the harbour. In addition to these obstacles, vessels cannot run from Dublin to Arklow without taking in ballast, for which they have to pay to the Dublin Ballast Board 2s. per ton, which can be saved by loading the ores at Kingstown. By this new and great advantage opened up to our most important mining district, the mining interest of Ireland is making another stride in its slow, but sure, course towards attaining that prominent position and attention which its abundance in valuable minerals deserves.

COAL MARKET.—On Monday, the 80 fresh ships which arrived comprised only a moderate quantity of house coal, for which there was ample demand, at an advance of 6d. per ton in prices. Hartley's were scarce, and rose 1s. per ton. In other sorts no alteration. Best house coal, 18s. to 19s.; seconds, 16s. 6d. to 17s. 6d.; Hartley's, 14s. to 16s.; manufacturers', 13s to 15s. per ton.—On Wednesday 18 ships arrived. The demand was steady for all descriptions of coal at fully last prices.—On Friday the arrivals reached 131 ships, and the weather being cold, there was a large business done in all descriptions of coal at fully Wednesday's quotations, only 10 cargoes remaining over at the close of the market. South Hetton Wallsend, 19s.; Stewart's Wallsend, 18s. 6d.; Lambton Wallsend, 18s.6d.; Braddyll's Hetton Wallsend, 18s.; Eden Main, 17s. 3d.; Hetton Lyon's Wallsend, 17s. 3d.; Shincliffe Wallsend, 17s. 3d.; Harton Wallsend, 17s.; West Hartley, 16s.; Hasting's Hartley, 16s.; Bute's Tanfield Moor, 13s. per ton: 130 ships at sea.

At Tolcarne Mine meeting, yesterday, the accounts for six months showed a credit balance of 264*l.* 2s. 2d., so that no call was required. The agent's report was very flattering; the reserves or ore are largely on the increase, and there is every prospect of this mine soon being in the Dividend List.

At the North Roskear Mine meeting (Mr. T. Field, jun.), the accounts for the quarter showed a profit of 182*l.* 7s. 10s. The assets exceeded the liabilities by 872*l.* 0s. 3d. A call of 25s. per share was made. Details in another column.

At the Rosewarne United meeting, held on Monday, the sett of the old mine was surrendered, and an adjournment took place to the 23d inst., to appoint the agents for the South Mine, and to arrange for the disposal of the machinery and materials as may not be required for working that mine.

At the Wheal Pollard meeting, yesterday, the accounts showed a debit balance of 100*l.* A call of 3s. per share was made. The agent's report was of a satisfactory character.

At the Treweatha Mine meeting, yesterday, the accounts showed a debit balance of 600*l.* A call of 2s. 6d. per share was made.

At Charlotte United Mines meeting, on Dec. 30, the accounts showed a debit balance of 2687*l.* 8s. 11d. A call of 8s. 6d. per share was made. A committee of finance was appointed, consisting of Messrs. R. Lanyon, S. Higgs, jun., Harvey and Co. (or one of the firm), R. V. Davey, T. B. Bolitho (or one of the firm), and J. Phillips.

At East Rosewarne Mine meeting, on Wednesday (Mr. R. M'Callan in the chair), the accounts, including November cost, showed a debit balance of 66*l.* 5s. Details in another column.

At Wheal Kitty (St. Agnes) meeting, on Tuesday (Mr. Odell in the chair), the accounts for the quarter showed a profit of 553*l.* Details in another column.

At Trumpet United Mines meeting, on Thursday (Mr. W. H. Halse in the chair), the accounts showed a debit balance of 559*l.* 15s. 2d. A call of 2s. per share was made. Capts. G. R. and W. Odgers reported that the greatest part of the tin for the quarter had been raised from the 15 fm. level, and if the under levels should prove as productive they will at once increase their returns. They estimate the cost for the coming quarter at 540*l.*

At East Gunnis Lake and South Bedford Consols Mines meeting, on Jan. 8, the accounts showed a debit balance of 502*l.* 7s. 10d. A call of 4s. per share was made. Capts. W. G. Gard and Phillips, in their report, say—"It gives us much pleasure to report to the adventurers that we shall return enough ore for the months of Dec. and Jan. to meet the costs of the mine, and (as far as it is possible to calculate) shall continue to do so till we arrive at that still better position of paying dividends, which we have every reason to believe our returns will enable us to do before the close of the year."

At the Vale of Towy Mine meeting, on Jan. 8, the accounts showed a debit balance of 382*l.* 3s. A call of 1s. per share was made. Capts. Waters and Harvey reported that the tribute department was yielding much as usual. "We have 13 pitches being worked by 26 men, at tributes varying from 120s. to 140s. per ton of lead ore; and 1 pitch by 2 men, at 20s. per ton for blende, 80s. per ton for lead ore, and 2s. 6d. per ton for first quality barytes. Persons employed as follows:—Tutwork men underground 19, tributers 28, fillers and landers 3, surface labourers 3, boys and girls on floors 24, smiths and carpenters 4, enginemen 4, pitman and dresser 2, agents 2=89, exclusive of carriers of lead, coal, wood, &c."

At the New Wendron Consols quarterly account, on Monday, a call of 20s. per share was made, to discharge liabilites and for future operations.

At East Devon Great Consols meeting, on Tuesday, the accounts for the four months ending December showed a debit balance of 402*l.* 8s. 8d. A call of 2s. 6d. per share was made. Capts. Neill and Richards reported that upon extending north on the cross-course at the 40 they have met with another branch or lode, 1 foot wide, of a very promising character; but before opening farther on this, they would recommend an extension of the cross-cut still farther north, to prove whether or not more lode is standing in this direction.

At the Gurlyn Mine meeting, on Wednesday, the accounts for the four months ending Oct. showed a debit balance of 576*l.* 18s. 10d. Capts. Curtis, Martyn, and Rees reported upon the various points of operation. Since the last meeting, on Sept. 17, they have driven 35 fms. in the 30 fm. level, east of Wheal Fox flat-rod shaft, and have just reached the productive ground driven through in the level above. In the last 2 fms. driving the lode has increased in size from 2 to 4 feet wide, and is worth for copper ore 10*l.* per fathom. The 30 west is opening tribute ground. The 20 is driven 16 fathoms, and has been worth from 10*l.* to 15*l.* per fm., and is still passing through ground of the same value. The Christmas holidays and the heavy rains have considerably interfered with their last months' operations, whence the falling off in their last sale of tin.

At the St. Ives Wheal Allen meeting, held at the mine, on Jan. 7, the accounts showed a balance of 538*l.* 6s. 1d. against the mine, and a call of 10s. 6d. per share was made. The agents reported the 30, east of Geisler's shaft, worth 14*l.* per fm.; the 20 east, 10*l.* per fm.; the winze below the 20, 9*l.* per fm.; and the adit, on the new Carbona lode, 20*l.* per fm. In a few days the new shaft will be holed to the adit, on the new Carbona lode, and the sinking will be continued below adit, on a lode worth 21*l.* per fm. If the different points continue to open as at present they expect soon to pay cost.

From Chili, we learn that the silver mines were turning out very productive, and the late rise in copper had given a great impulse to that branch of trade. There had been a great influx of gold bars at the mint of Santiago.

LEEDS, JAN. 15.—The Mining Market has been firm during the past week, without much business doing. Wheal Prudence Company is progressing rapidly, and the engine will very shortly be at work. About 50 tons of ore will be sampled almost immediately; this is from the adit level alone, and when the engine goes to work the returns will be largely increased, and a very considerable advance must take place in the value of the shares. The Cornubia Mine is also rapidly improving.—EDW. BROOK, Mining Broker, 5, Bank-street.

LEEDS, JAN. 15.—In Mining Shares business has been restricted, and prices depressed. Enquiries have been made for Hebden Moor, Harwood shares, &c. We are informed that an important discovery of lead ore has been made in the No. 1 level of the late Wheal Henry, Helvellyn, now called the Wythburn Lead Mining Company, Cumberland.—J. GLEDHILL AND CO.

THE SPELTER TRADE.—Messrs. Berger Brothers report that during the last five weeks about 500 to 600 tons have been sold on the spot and in Hull, principally to consumers, at 18*l.* to 18*l.* 2s. 6d. Our expectations that the stock at the end of last year would not be so large as anticipated were fully realised. The future prospect of this article will, to a certain extent, depend upon the events occurring in America, but even if these do not bring the war to a termination our present prices are so moderate that we think they must improve; not only is this the case in England, but in Hambro' the present price (equal to 18*l.* 10s. landed here) is the lowest attained during the last 20 years, saving five exceptions. The stocks as taken from the principal markets are not in the aggregate above the average, and whilst the production has decreased (nearly 2500 tons in Silesia) the consumption, on the other hand, has been greater. The demand from India must, sooner or later, influence our markets, in which during the last twelve months prices have generally been lower than on the Continent.

GEOLOGICAL SOCIETY OF LONDON—Jan. 7.—Prof. A. C. Ramsay, President, in the chair: John Daglish, Hetton, Durham; Griffith Davies, Cloudesley-street, Islington; John Walter Lea, B.A., Shepperton-green, Chertsey; and Henry Michael Jenkins, Assistant-Secretary of the Geological Society, St. George's-road, London, were elected fellows. The following communications were read:—

1.—"On the Lower Carboniferous Brachiopoda of Nova Scotia," by T. Davidson, F.R.S., F.G.S.

2.—"On the Gravels, and other Superficial Deposits of Ludlow, Hereford, and Skipton," by T. Curley, C.E., F.G.S.

On Wednesday, the following papers will be read:—1. "On a Northerly Extension of the Upper Silurian Passage-beds to Linley, Salop," by George E. Roberts and John Randall: communicated by the President.—2. "On some Crustacean-tracks from the Old Red Sandstone near Ludlow," by George E. Roberts: communicated by the President.—3. "On the Parallel Roads of Glen Roy, and their place in the History of the Glacial Period," by T. F. Jamieson, F.G.S.

CORNISH PUMPING ENGINES.—The number of pumping-engines reported for Dec. is 31. They have consumed 2431 tons of coal, and lifted 18·5 million tons of water 10 fms. high. The average duty of the whole is, therefore, 51,100,000 lbs. lifted 1 ft. high, by the consumption of 112 lbs. of coal. The following engines have exceeded the average duty:—

Alfred Consols—Davey's 80 in.	Millions	78·8
Cargoll—70 in.		52·1
Carn Brea—76 in.		51·4
Crane—70 in.		66·7
Dolcoath—Harriett's 60 in.		53·1
Great Wheal Busy—Harvey's 85 in.		59·0
Great Work—Leeds' 60 in.		67·1
North Roskear—Doctor's 70 in.		54·4
North Wheal Crofty—Trevenson's 80 in.		52·3
South Wheal Frances—Marriott's 75 in.		65·3
Stray Park—64 in.		55·2
Treloweth—60 in.		57·3
West Caradon—Elliot's, 50 in.		77·0
West Wheal Seton—Harvey's 85 in.		52·5
Wheal Ludcott—Willcock's 50 in.		55·8
Wheal Seton—Tilly's 70 in.		69·7

DEATH OF CAPTAIN NICHOLAS TREDINNICK.—The mining interest of Cornwall has sustained a great loss in the death of one of the best agents—Capt. TREDINNICK, late manager of Great Work Mine. Distinguished for a superior knowledge of mining, and for sterling integrity, he won for himself the high esteem of all who knew him; and the adventurers in Great Work will find it difficult to obtain a successor of equal talent. He rescued that mine from impending ruin; for, on his accession to the control of the works, he found everything in disorder, and a monthly loss of several hundreds of pounds. He set himself to work out the renovation of the concern, and so far succeeded as to clear all the shafts of rubbish and water, and although he expended 10,000*l.* in these works (machinery, &c.), he raised tin to cover all that cost, and pay off a heavy balance at the bankers. It is satisfactory to find that the company are fully sensible of his worth; and I trust that the invaluable services rendered by him will induce them to remember his family. His illness was very brief, and his death occurred at Helston last week.

LEAD ORES.

Sold on the 9th January.

Mines.	Tons.	Price per ton.	Purchasers.
Wheal Frank Mills'	35	£13 10 0	Stock & Co.
ditto	30	13 9 6	R. Michell & Son.
South Exmouth	85	12 1 6	ditto

Sold on the 12th January.

Great Laxey	100	17 0 6	ditto

BLACK TIN.

Sold on the 7th January.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Garlidna	5 8 3 8	£67 0 0	£ 364 11 0	—Bissoe.
ditto	1 18 1 23	59 0 0	113 8 10	ditto
St. Day United	38 14 2 23	—	2149 15 6	—

Sold on the 10th January.

Kitty (St. Agnes).	15 1 0 17	—	963 13 6	—

BLACK TIN sold from the GREAT WORK MINE during the year 1862.

January, February, and March	54	tons	5	cwts.	3	qrs. 21 lbs.
April, May, and June	57	„	3	„	0	„ 11 „
July, August, and September	68	„	11	„	1	„ 3 „
October, November, and December	85	„	10	„	9	„ 13 „
Total	265	tons	11	cwts.	0	qrs. 20 lbs.

And about 24 tons Copper Ore, at 9*l.* per ton.

	Tons c. q. lbs.	Amount.
Boscean	151 17 3 4	£10,526 0 0
Boscaswell	129 1 1 12	8,016 8 7
Carnyorth	124 18 1 4	7,780 14 7

COPPER ORES.

Sold at LIVERPOOL, by Mr. James Lewis, on the 9th January.

Mine.	Tons.	Price per ton.	Purchasers.
Knockmahon	50	£10 3 6	St. Helen's Co.
ditto	25	10 4 6	ditto
ditto	25	10 4 6	Newton, Keates, & Co.
ditto	50	10 1 6	ditto

COPPER ORES.

NO SALE on Thursday last, January 15.

Copper ores for sale on Thursday next, at the Royal Hotel, Truro—Mines and parcels.—Devon Great Consols 2114—Phœnix 506—East Caradon 475—Marke Valley 420—Hingston Down 390—Great Wheal Martha 269—East Russell 238—Holmbush 204—Bedford United 200—Wheal Edward 176—Wheal Friendship 152—Kelly Bray 141—Lady Bertha 136—Wheal Emma 130—Gawton 94—Calstock Consols 84—Brookwood 75—Gunnis Lake (Clitters) 60—Fursdon 43—Hawkmoor 23—Total, 5926 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and Parcels.—South Caradon, 506—West Caradon 467—Great Wheal Busy 451—North Treskerby 395—Clifford Amalgamated 384—Fowey Consols 280—Wheal Polmear 250—Tywarnhaile 200—North Downs 200—Craddock Moor 150—South Crinnis 132—St. Day United 94—Prideaux Wood 60—Molland 55—Burra Burra 44—Wheal Prudence 40—Wheal Towan 37—Perran 28—East Wheal Ellen 10—Goon Zion 8—Eddy's Ore.—Total 3797 tons.

Copper ores for sale at Swansea, Jan. 20.—Cobre 103, 100, 99, 98, 84, 104, 102, 97, 94, 105, 92, 83—Knockmahon 62, 59, 81, 68, 68, 67, 97, 89—Cuba 84—Worthing Regulus, S.A., 37—Lochwinnoch 12.—Total, 1885 tons.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

TINCROFT MINING COMPANY.—Tincroft Mine having very recently been changed from a scrip company to the Cost-book System, I think it will be very proper when the adventurers meet for the first time under the new system to appoint an auditor to examine the accounts, to see how many scrips are missing, and when they were last in the office of the company, and likewise to ascertain how the dividends have been appropriated.—A SHAREHOLDER: *Jan.* 13.

WINDING-UP MINING COMPANIES.—My experience fully bears out the statements of your correspondent, "Y. Z.," as to the length of time taken in winding-up the accounts of dissolved companies, and, perhaps, in some cases it is unavoidable; but it is a fact too well experienced that rarely, notwithstanding the Journal has actually stated the amount for which a mine and machinery has been sold, a farthing ever reaches the fingers of a small shareholder, or a statement given to him of the disbursements. In the case of Great Wheal Alfred, the committee have already received nearly 5000*l.* from Alfred Consols for part only of the machinery. Ore has been raised and sold in 1862 to the value [of 16,513*l.*, according to Mr. J. Y. Watson's "Progress of Mining in 1862," and there were many hundred tons sold in 1861, and after the resolution to wind-up; and there ought to be no debts, a call having been made since the dissolution to pay off old scores. So the shareholders, numbering about 5000, have a right to expect a very large return of capital—at least 2*l.* to 3*l.* per share. Without any reflection on the committee of Great Wheal Alfred, who I have no reason to believe are acting otherwise than honestly, I recommend shareholders generally, when they suspect dishonesty, to file a bill of discovery in Chancery. Any individual shareholder may do it; the costs are trifling, and ultimately come out of the funds of the company, and the funds may as well be spent, so far as the general shareholder is concerned, in law as pocketed by individuals.—A LAWYER AND A SUBSCRIBER.—[So far as Great Wheal Alfred is concerned, we have the secretary's assurance that all the books and accounts are open to the shareholders, and that he is ready and willing to afford every explanation whenever called upon.]

SHARE DEALING.—(J. P., Hereford.)—1. We never recommend and particular mine, or agent.—2. The "Annual Review of Mining" will be forwarded an receipt of postage-stamps for 1s. 1d.—3. Consult your solicitor.

MINE INSPECTION.—I fear your correspondent, Mr. J. Y. Watson, has unwittingly misled many of his clients during the 19 years he has been advising them to look for disinterested reports from agents managing other concerns in the immediate district "where the mines are said to be." Undoubtedly, most of your readers are aware that disinterested reports from such quarters are very rare indeed, the neighbouring agents, in most cases, being either interested in the establishment of the new concern, and consequently in danger of exaggerating the prospects; or, on the other hand, are moved by self-interest to do all their power, directly and indirectly, to frustrate the plans and designs of the new comers, and in several instances that have come under my own observation, parties have been prevented from joining, the leases had to be given up, and the opposition immediately took up the forfeited royalties, and in too many instances realised fortunes from ground they never considered worth touching until they saw it in the hands of people they knew to be more competent in such matters than themselves. I would, therefore, beg to suggest, for Mr. Watson's future guidance, if he wants disinterested reports, let him apply to men of thorough experience from other districts than that in which the mines occur; he may then make tolerably sure of getting disinterested opinions, but it must be a very small concern that anyone could do justice to for the small sum of 2*l.* 2s., except where there is only a point or two to be examined, with a view to determine whether there has been a falling off or increase in the yield from a previous inspection.—A MINER.—[We believe there are men to be found in most districts who will give conscientious and *disinterested* reports, though in some cases, and under particular circumstances, perhaps the suggestion of our correspondent should have weight.]

CHARLOTTE UNITED.—At the meeting, on Dec. 30, a call of 8s. 6d. per share was made, to be paid on or before Jan. 7; and another meeting is to be held on Jan. 20, to make another call, up to the end of December. "Rather sharp practice this," and not only so, but all who do not promptly pay the calls will no doubt receive a lawyer's letter, threatening them with a writ, which has been already done in some instances. It will be observed that Mr. Hosking's name is not on the list of those present at the meeting, neither is his name on the circular sent to the shareholders, which has been usual. Surely, Mr. Hosking has not given up the partnership; if so, what has he done with the large number of shares standing in his name?—NOT A MERCHANT.

"C. T." (Carmarthen).—Your letter, on "Miners and Mining," shall appear next week.

SOUTH WHEAL ELLEN.—Many months—I believe nearly two years—have elapsed since the proceeds of the sale of materials were paid into the hands of the purser. Since then no meeting of the adventurers has been called, and no account rendered, although complaints have been made through the Journal on account of it. I would ask when he intends to convene the company and pay over the balance in hand?—A NEIGHBOUR: *Redruth, January* 15.

Mr. Evan Hopkins is on a mining tour in Ireland. Letters addressed to the Imperial Hotel, Dublin, will reach him.

EAST BRONFLOYD MINE.—Mr. Jonathan Pell, of Aberystwith, as being a known and unprejudiced miner, has been selected and requested to inspect and report on this mine in the way suggested by your correspondent, "A Miner." I have never seen Mr. Pell in my life, but have no doubt that he will give a fair statement of what he sees, and that his report, printed in your Journal as soon as it arrives, will settle this question at once.—ANOTHER MINER: *Jan.* 13.

Late receipt compels us to postpone several communications, including—Re-registration of Companies—Smelting of Iron with Peat Charcoal—Accidents in Collieries—Bronfloyd and East Bronfloyd (2)—Ventilation of Mines, &c.

*** The TITLE-PAGE and INDEX to the THIRTY-SECOND VOLUME of the MINING JOURNAL will appear next week.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 17, 1863.

Iron may in truth be considered the most important metal of commerce. Gold may be the chosen representative of wealth, and also be used for numberless purposes, both useful and ornamental; but in the present state of civilisation it might be far more conveniently dispensed with than its more familiar brother. To the agency of iron we must trace the existence of the steam-engine in its present state of effectiveness, and but for it we should not enjoy those advantages which railways have so bountifully bestowed upon us. Iron has also supplied ships of that class for England that the abounding and almost inexhaustable forests of America have produced for our transatlantic kinsmen. It has enabled us to cope successfully with them in the commerce of the seas, and to build such ships of war as no other country in the world has the means of constructing.

It has often been a matter of discussion as to whether coal does not constitute a greater source of national wealth than iron ore, but the two interests are so inseparably linked together that we should look upon them as two members of the same family, rather than as occupying separate and independent positions. Although it is evident that without the existence of our coal fields the iron ore deposits of this country would have been of inconceivably less value than they now are, and the iron trade would have been a mere nothing, yet, on the other hand, had our mineral treasury not included iron ore to the extent already proved, coal would never have formed so important a position in the trade of the United Kingdom as it now does. In many districts we believe that iron would be largely manufactured by means of charcoal now, the same as in times past, especially in places like the Forest of Dean, where a great deal of charcoal is constantly being made; but were this the case the metal would be more costly, and though charcoal iron may find buyers for special purposes, yet it is in the cheapness of the article, so far as cheapness can be attained by the simple use of mineral fuel instead of charcoal, that we must look for its more general adoption. In preceding Journals we gave accounts of the Forest of Dean coal basin; it is now our intention to lay before our readers a description of the great iron ore deposits. These occur in the carboniferous limestone immediately underlying the coal basin, and should in justice be looked upon as some of the most important in the kingdom. The ore consists of red hematite, which, as may be seen from the following analysis, is remarkably free from sulphuric and phosphoric acids and bisulphide of iron. It contains a large proportion of carbonate of lime and carbonate of magnesia, which much facilitates the working of the ore in the furnace, and obviates the use of that quantity of flux which many hematites require.

There is a very manifest advantage in the admixture in the ore of a moderate proportion of flux over those instances where it is necessary to obtain it from other sources, and mix it in the blast-furnace. When the flux is diffused in the character of the ore it stands to reason the charges must work much more regularly and uniformly than where separate flux has to be resorted to entirely. We do not wish it to be inferred from these remarks that no flux is added in addition to that contained in the Forest of Dean ore when it is being smelted; on the contrary, small charges of limestone are used, but these are insignificant. The analysis here given is the average of five, made from different samples of the ore, obtained from different localities in the Forest:—

Water	4·33
Carbonate of lime	25·00
Carbonate of magnesia	19·00
Oxide of manganese	·04
Peroxide of iron	44·00
Alumina	2·06
Sulphuric acid	trace
Phosphoric acid	trace
Bisulphide of iron	trace
Insoluable residue	6·07=100·50

Those iron ore deposits are contained in a basin that is about 12 miles in diameter from north-east to south-west, and 10 miles from north-west to south-east. They do not lie in veins like the coal, but occur in churns, or immense pockets, some of which are sufficiently extensive, when emptied of their valuable contents, to hold a moderate sized church, supposing the vacancy could be kept open. On the eastern side of the Forest, the measures that contain the iron ore are very much steeper than those on the western side; indeed, they may be said to follow in exact order the positions of the coal field. The principal localities in which the iron ore has been worked are Cinderford, Edge Hill, and Bream. At, and in the neighbourhood of Cinderford Mr. HENRY CRAWSHAY has in work three extensive mines, from which the Cinderford Ironworks (belonging to the same gentleman) are supplied. The largest of these works is called Shakemantle, and a noble work it is. Some idea may be formed of its character when we state that two 27-in. plunging-pumps are employed to keep it free from water. The whole of the machinery is of the most powerful and effective description; the cylinder of the engine is placed immediately over the pumping-shaft, and the pump-rods are attached to the piston-rod. It may be imagined by some of our readers that such expensive machinery, and operations of so costly a nature, would render the working of such mines unprofitable; such, however, is not the case, for in many instances the ore, when delivered at the top of the pit, has not cost the proprietor more than 1s. 6d. per ton; and it is our confirmed opinion that the average cost of the entire output is not more than 4s. per ton. This same ore will readily realise prices varying from 8s. to 10s. per ton when loaded into the railway wagons.

At Edgehill, the Dowlais Iron Company are working a large and very profitable mine, the entire produce from which is sent into South Wales to their furnaces; the situation of this mine is not so favourable as Mr. CRAWSHAY'S Shakemantle Pits, as the latter immediately adjoin the Bullo Pill branch of the South Wales Railway, whilst the former are situated at least a mile and a half from it, so that all the produce has to be carried by tramway down a very steep hill that distance, and then to be re-loaded from the trams into the railway wagons. Expensive as this is, there has been always left a good margin for profit, and inasmuch as the Dowlais Company's machinery is not of so expensive a character as Mr. CRAWSHAY'S, we doubt not but that their works give quite as large a profit on every ton of ore raised as Mr. CRAWSHAY'S do. At Wigpool, near Drybrook, the Messrs. ALLAWAY and Co. have recently opened a mine which bids fair to be very productive. Messrs. BARRETT and Co. are also opening one in the immediate neighbourhood of the Dowlais Company's work, deeper in the measures. These are all the iron mines at present worked on the eastern side of the Forest, with the exception of a small concern which is the property of the Forest of Dean Iron Company. At Bream, and the district between that place and Coleford, there are several small works, but as the operations are not extensive, horse-wheels and handwhims being the machinery employed, we think them undeserving of individual notice. At Coleford a rather extensive mine has been opened, called the Eastern Mine, from which it is asserted upwards of 60,000 tons of ore has been obtained from under a single acre of surface. This, as well as the "Sling Pit," is in the flat measures, and has a natural drainage. We have no doubt that in the course of a comparatively short period this district will be quite as extensively worked as the Cinderford district.

The want of sufficient railway accommodation has evidently been the greatest barrier to its progress; in the course of another year or two, however, the Monmouth, Coleford, and Usk Railway will be completed, and then a direct communication will be opened with South Wales and the Staffordshire districts, each of which will, without doubt, take large quantities of the Forest of Dean ore. The iron made in the Forest from its native ore bears a very high character, and from its toughness is largely employed in the manufacture of tin-plates. It is also more suitable, perhaps, than any other, with the exception of the Low Moor and Weardale iron, for the making of ordnance. There are only two companies at present making iron in the forest, Messrs. CRAWSHAY being one, and the Forest of Dean Iron Company the other. The present price of Forest of Dean pig-iron is 70s. per ton at the works, and when in conjunction with this price we consider that the ore can be obtained at so low a cost it is very difficult to account for the fact that there are not more ironworks in the Forest of Dean. This subject, as well as the neglected state of the coal and iron mines, will be treated on in our next.

MINES, MINERALS, AND MINERS—No. II.

[FROM A CORRESPONDENT.]

If our definitions have been correctly understood, it will, we think, be evident to most of our readers that we restrict the term SCIENCE to the ascertainment and illustration of truth. We have *Experimental Science* and the *Science of Observation*. In pursuing the former, we subject the question to every kind of *Analysis*, or taking to pieces, and then confirm our results by a process, known as *Synthesis*, or putting together. Unless the one is confirmatory of the other, we are bound to hold our judgment suspended. Take an example: yellow copper ore is subjected to *Analysis*—we find that it consists of iron, and copper, and sulphur, in certain proportions; being, in fact, a sulphuret of iron and a sulphuret of copper combined together. If we place like proportions of sulphur and iron in a crucible, and combine them by Heat, we produce the first, and if we treat copper and sulphur in the same way we obtain the latter—this is *Synthesis*. By sending a current of Electricity into a drop of water we decompose it into two gases, Oxygen and Hydrogen—this is *Analysis*. If we put the same quantity of these two gases into a strong glass vessel, and force them to combine, as we may by Electricity, we produce a drop of water. Here we have the *Synthetical* proof. One without the other would be incomplete, and could not be received as an established truth.

Sciences of Observation demand an equal amount of exactness, and hence it is, that, the Science of Astronomy, having submitted to the necessary tests, has become the most exact of all Sciences. Observation is the foundation of all knowledge, but it is found, by long experience, that "How to Observe" which is all important to progress, can only be learned by a very systematic training of the senses and of the mind. In the *Sciences of Experiment* we can cross-examine our witness, and by reasoning on the evidence, put yet more searching questions, the answers to which will enable us to arrive at some satisfactory conclusion. In the *Sciences of Observation* we have to notice facts as they occur, and carefully and accurately to record those facts, and from a careful study of all the conditions to make our deductions.

It has been found invariably that in those departments of science where the phenomena are beyond our control—that is, into which experimental enquiry cannot be carried—the progress of knowledge has been irregular, slow, and uncertain. Let us take an example of this. Men have been through all ages familiar with Minerals. They have employed them for use and for ornament, and they have been described with, apparently, great care. Let anyone turn to the ancient books on Mineralogy—see how Theophrastus or Pliny describes even the precious stones, and they will find it nearly impossible to distinguish any one of them by their descriptions. Those great men were utterly ignorant of any guiding principle.—Eventually the science of Chemistry lent its aid—Minerals were decomposed into their ultimate parts, and the Science of form, Crystallography, shew that there was a constant order observed by Nature in her Geometry. This being known, grouping became easy—Minerals were properly defined, and Mineralogy became a Science.

The progress of human knowledge appears to be through periods of doubt and darkness, where man trusts to uncertain lights, which often lands him in inextricable difficulties. Astrology was the road through which the perfect science of Astronomy had birth. Alchemy, with its wild delusions, advanced man to a knowledge of the Science of Chemistry, Geognosy, with its poetical hypotheses, was the road by which the Science of Geology advanced, These, and a few other branches of Science have emerged from the darkness—the chaos in which, as it were, the incubation of knowledge goes forward. Many important enquiries are, however, doomed to perish in this process. There is no one of the Occult or doubtful sciences which has not a substratum of Truth upon which the superstructure of error is raised; therefore, in rejecting even those, care must be taken to avoid the error of rudely putting them aside altogether. The real philosopher will endeavour to select the grains of truth from out the mass of error. In actual life we find men labouring unceasingly in washing away their 98 tons of mud, that they may secure in its purity the valuable 2 tons of tin. Let us as carefully, in our mental operations, perform the same process, and we shall advance the Truth. The application of these remarks to MINING must be our next endeavour.

The following circular letter is being circulated by the Miners' Association of Devon and Cornwall to all the mines in the two counties:—

"The Miners' Association of Cornwall and Devonshire has been organised with a desire to advance the mining interests of Western England, and to promote the welfare of the working miner. It has been felt by many who are intimately connected with mining operations that, with the increasing depths of mines, and the greater competition in mining abroad, it becomes necessary to avail ourselves to the utmost of the later applications—instead of depending mainly on the earlier discoveries—of science. Hence, classes have been established for the purpose of imparting as much knowledge in chemistry, mineralogy, and mechanics as appeared to be necessary to enable the miner to pursue his calling with less labour and suffering from accident, or disease, and with greater benefit to his employer. We do not doubt that many of your mine agents are eminently skilled in the best means of carrying on the great undertakings committed to their care; a knowledge not acquired in colleges, but by unweared observations and arrangement of facts, through years of toil and thought, but the average life of miners is too short, and their opportunities for working out similar results by individual observation too few, for them to be independent of the knowledge acquired by others. These classes have been exceedingly successful. Nearly 150 persons have received instruction in the above-named branches of science, and this at a cost which scarcely exceeds 2*l.* a head per annum. The manner in which the students passed the examinations of the Department of Science and Art proves the aptitude of the Cornish miner for acquiring knowledge. The Miners' Association contemplates, as another means of effecting a great good, the establishment of meetings amongst the experienced miners, at which statements of observations should be made, papers read, and friendly discussions encouraged. The Association desires to see those meetings taking a local and essentially a practical and friendly character, convinced that we must not trust to memory only, but obtain records also of that experience which is as important in mining as it is in any other division of human industry. In several districts classes are now in healthy operation, and others are asking the aid of the Miners' Association that similar ones may be established in them. The resources of the Association limit its usefulness. With increased means much more real good would be evident; the great object being the removal of those difficulties which result, from the imperfect knowledge of the many, in different departments of mining, and extend over an area in which skilled miners can only occasionally be present. It is hoped that the Association may count on your aid collectively or individually by subscribing to the funds. A very small sum annually from each mine in the two counties would produce a handsome income, which might be applied greatly to the advantage of the mining interests, and conduce to the mental and bodily improvement of the miner. In obedience with the wishes of the Council, I lay this before you, and in doing so allow me to solicit your most friendly consideration.

ROBERT HUNT, Honorary General Secretary.

A notification of your intention to subscribe may be addressed to the treasurer, Mr. R. H. Pike, Camborne; or to Mr. R. Hunt, Mining Record Office, Museum of Practical Geology, Jermyn-street, London.

UTILISATION OF WASTE HEAT FROM PUDDLING-FURNACES.—In constructing puddling-furnaces according to the invention of Messrs. Hill and Caddick, of Ebbw Vale, the bottom, or bed, is supported upon short columns ranged around the outer edge of the bed; on the top of these columns a metal frame rests. This frame is open in the centre, and the outer edge of the frame is of the same shape as the outer edge of the bottom of the hearth. Across the opening in the centre of the frame bars or beams are placed, which support the metal plates forming the bottom or bed. The sides of the hearth are formed with broad flanges, upon which the arched roof is supported. These flanges also rest on iron columns placed at intervals along the side of the hearth. These columns being made longer than the columns which support the bottom or bed. In order to be enabled to cool the bottom and the sides and ends of the hearth, when desired, arrangements are made according to this invention for directing jets of water against them and through the ends and under the bottoms of the furnace and of the hearth; that is to say, at the bottom and bridge and sides and ends holes are formed, in order that the jets of water may come in contact with the lining which is placed over those parts of the hearth. The bottom of the puddling-furnace is constructed of several wrought-iron plates rivetted together, but the sides of each plate forming the bottom are bent down so as to form flanges, which are inserted into wrought-iron troughs. The waste heat from the furnace may be caused to heat the boiler in the

following manner:—The flue from the end of the furnace rises up vertically for a short distance, and in this portion of the flue is placed an oblong boiler, by preference circular in section, a space being left between the interior of the flue and the exterior of the boiler. The heated gases from the furnace thus pass up around the boiler, and are led away into a chimney by another flue, which opens into one side of the upper end of the vertical flue.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN 15.—The state of the Coal Trade, the most important mineral produce of Northumberland and Durham, at the commencement of another year naturally attracts the attention not only of the coalowners and workmen, who are more immediately concerned, but also of the general public, who are also interested, though indirectly. The published returns present many important features for consideration. The quantity of coals sent constwise to London and other ports, and also exported during the eleven months ending Nov. 30, shows a considerable decrease as compared with the same period in 1861, the total quantity being 9,212,438 tons, against 9,593,870 tons, there being a decrease of 381,432 tons. This is a very large decrease, when the ordinary rate of *increase* is considered which takes place in average years. The prices obtained have also been lower, best coal having realised 17s. 5d. per ton, and second coal 15s. 5d. per ton; those prices being 2s. per ton below the average of last year for best coals, and 1s. 9d. below last year's average for second coals; but the difference of freight for the past year is in favour of the coalowner, the average being for 1861, 6s. 10d. per ton, and for 1862, 6s. 2d. per ton. The report of the Coal Trade Committee, read at a general meeting of the trade held on Dec. 30, contains the particulars given above. The remedy urged by the committee for the adoption of the coalowners is to reduce the quantities worked and supplied to the London market, so as to ensure better prices. This appears to be the only practicable mode at first sight; and it is plain that the opening out of new mines, and a rapid increase in the production, has been going on for some time, in defiance of the decreased demand. But it must also be borne in mind that competition is to be met from other coal fields, especially from the midland coal districts, from which the coal is conveyed to London by rail. The quantity sent to the metropolis in this way appears to have been, in 1862, 1,338,270 tons; the quantity sent to London from Northumberland and Durham during the same period being 2,899,123 tons. The quantity supplied from inland being, in fact, nearly equal to half the quantity from the northern field. In the face of this, it may be well to enquire whether any serious "starving" of the market by the northern coalowners may not have the effect of stimulating further the development of the midland trade by the enhanced prices secured, and thus ultimately bringing the matter to its former level, and the lowest remunerative prices; at any rate, reducing the cost of transit, and the cost of delivery in the Thames, would give the northern owners better chance of competing with other coal fields—and this appears to be a subject to which they might profitably turn their attention. The Iron Trade of the district appears to be in a most satisfactory condition. Large rolling-mills, puddling-furnaces, and forge-hammers are in course of erection at Jarrow where smelting-furnaces, engine works, &c., have been in operation some time. The stocks of pig-iron in hand are light, the quantity reported as being on hand Jan. 1, 1863, being 39,134 tons; the highest price realised during the year being 51s., which is the present price. The stock on hand Jan. 1, 1862, was 60,000 tons; make during the year, 705,529 tons=765,529 tons. Shipped for exportation abroad, 146,436 tons; used in the rolling-mills and foundries in the district, shipped for delivery coastwise, and sent away by rail, 580,959 tons=726,395 tons.

A delegate meeting of men representing the workmen from several of the Northumberland collieries was held in Newcastle on Saturday. From what passed at this meeting it is clear that some little ill-feeling has been produced by the late negociations between the owners and workmen respecting prices, the yearly bond, &c. The primary cause of this is the long depression which has crippled the resources of both workmen and owners, and, as a natural result, no doubt soured the tempers of both parties; but this will, we have no doubt, speedily pass away, especially if a better demand for coal should spring up, which it is hoped will soon be the case. At the delegate meeting referred to (which was only thinly attended) the subject of establishing a Union for the protection of their interest was revived, and after some discussion it was agreed to call the Institution by the ominous name of the "Victim Fund." If the meeting had been larger, and the workmen more fully represented, we would give them the credit of believing that a better title than that would have been chosen; however, it is not at all likely that the Union will meet with general support, for the very simple reason that there really is no necessity for it. The trade is now much too large and extensive for either of the parties to effect much by a combination. The supply and demand must and will settle both the price of coal and the price of the labour of its producers. The only collieries reported as not having got settled are the Seghill, Cowpen, and Seaton Delavel. Meetings have been held between the parties interested in these cases, but we have not as yet heard of an understanding being come to, but hope it will not be long delayed.

The differences at the Seaton Delaval Collieries have been most amicably adjusted, the prices being advanced 1d. per ton. Mr. Forster has also kindly determined to treat the whole of the workmen to a supper, which is shortly to come off. The only colliery not settled now is the Seghil Works, and here the prices have been agreed upon, but some dispute has arisen between the parties as to the number of the men to be employed, the owners having arranged to set a less number to work than formerly employed. The men at this colliery have now been on strike a fortnight, but it is hoped that their differences will shortly be arranged.

THE IRON TRADE OF THE NORTH-EASTERN COUNTIES OF ENGLAND.

NEWCASTLE-UPON-TYNE, JAN. 12.—Taking a broad view of the Pig-Iron Manufacture in this and in other districts, it must be admitted that the aspect of the trade during the past twelve months has been much more hopeful than the appearance it presented in the course of a few preceding years.

The Scotch pig-iron trade, during the earlier and latter portions of the past year, exhibited a marked contrast. Depression was its characteristic feature for the first few months; and to correct the downward tendency of prices, caused by steadily increasing stocks, an unsuccessful attempt was made to curtail the manufacture. For the most part of the latter half of the year speculation, based on the hope of an early termination of the American war, aided by a plethora of money, and by a brisk demand for ships' plates and other rolled iron, ruled the market, and a higher range of prices prevailed. The lowest sales were made in January, when "warrants," in Glasgow, brought only 48s. per ton; whereas, in September, they sold as high as 57s. 6d.; the closing price of the year being 54s.

In the Cleveland district the average price has been lower than the above named. Commencing with the year at 48s. 6d. per ton from No. 1, free on board in the Tees, it did not at any subsequent period reach a higher point than 51s., which may be called the figure at the present time; whilst for No. 3 the discrepancy between the two markets has been still greater. For shipment in the Tyne higher rates are maintained.

This somewhat anomalous condition of the pig-iron trade may be attributed to speculation in warrants, representing iron in store, forcing prices up in the Scotch market; whilst in the North of England the article has maintained its natural value, in consequence of the more legitimate character of the trade, the transactions usually being for iron going into actual consumption. Owing to this more healthy state of the manufacture, and to the stimulus afforded by the new and more liberal commercial policy recently adopted, there has prevailed during the past year a steady and improving demand for the pig-iron of this locality—a result which has more than compensated for the greatly diminished deliveries in the Lancashire and other usually large consuming districts.

It is understood that another rolling mill is to be erected in the locality, a description of manufactory which is becoming a useful adjunct to the iron furnaces, and is materially contributing to a more prosperous state of the iron trade in this district. And there can be no doubt that the geographical outline of the country particularly adapts it for the manufacture of plates and other descriptions of rolled iron required for purposes of shipbuilding; the rapid expansion of which branch of business on its noble rivers affords an excellent market for the species of iron referred to.

The favourable report given in the foregoing statement regarding the iron trade in the Cleveland district is fully corroborated by the following statistics. The year commenced with 60 furnaces in blast. In the course of the twelve months five new furnaces were put in operation, and six old ones were re-lighted. From these 71 furnaces the quantity of pig-iron produced, in 1862, amounts to 705,529 tons, being 98,529 tons in excess of the make of 1861. Of the disposal of this iron a statement is given below. There are now 32 furnaces in a state of inaction.

Total stock, January, 1, 1862 ..... Tons	60,000
Make during the year	705,529=765,529
Shipped for exportation abroad	145,436
Used in the rolling mills and foundries in the district, shipped per delivery coastwise, and sent away by rail	580,959=726,395
Total stock in the hands of makers, and in store, Jan. 1, 1863,	39,134

Notwithstanding the augmented make of the past year, the figures herein furnished show also a diminution in the stock of 20,866 tons, and which affords additional proof of increased activity in the trade. The foreign exports for the year exhibit an increase of 41 per cent. over the shipments of 1861, and of 125 per cent. above those of 1860, a result that is in some measure due to the French Treaty, which has caused an extended demand for pig-iron for the markets in that country; and is partly owing, no doubt, to the higher prices that have for some time existed in Scotland. With the knowledge that there has been a great falling off in the demand for the cotton manufacturing counties, the table given above indicates a greatly increased consumption of pig-iron in the rolling mills and foundries in the neighbourhood. These statistics must be regarded as highly satisfactory, and, viewed in connection with the prospect of an improved demand before long for the above-named markets, are promising for the future prosperity of the iron trade of this district.

Although in the ensuing year it is far from improbable that political events may occur of a nature to retard the further progress of improvement in the iron market, still there is strong ground to hope that, through a more favourable turn of affairs in America, the year that has just opened may witness the reactionary movement in the trade so long anticipated and desired.—RICHARD HOYLE.

REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 15.—The present position and future prospects of the Iron Trade are now the most inviting and important subjects for consideration. The last quarterly meeting of the Staffordshire ironmasters has been the means of concentrating more attention on the matter, and the closer the subject is looked into the more important it appears. It is an undisputed fact that the iron trade is in a better state at present than it has been for the last three years, and there is abundant evidence of such being the case throughout the South Wales district generally. This may seem strange, as three years ago peace reigned in nearly all the kingdoms of the globe, with but few exceptions, and our foreign trade was carried on without interruption. Since then a gloomy change has occurred in the once prosperous and united States of America, and the war has been the means of reducing the exports of iron to that country to about one-fourth of the usual quantity. Through the wisdom of our legislators in concluding the French Treaty and the natural expansion of commerce, the gap caused by the American war was gradually filled up. Energetic exertions were made to find new markets for the staple produce, and these proved successful to a great extent, and the result has been, as already stated, that the trade gives evidence of more vitality than has been observed since 1859. From September last to the end of the year a slight decline took place in prices, and it was feared that a further improvement would not take place without some decisive peace advices from America. Since the quarterly meeting, however, a better spirit has prevailed, and quotations are again advancing, and many of the makers show reluctance to enter into any large contracts. As practical evidence of a better state of things, it may be mentioned that Messrs. G. E. Bevan and Co. are preparing to put two furnaces in blast at Golynos, near Pontypool. These furnaces were formerly worked by Mr. Bailey and others, but everything has been at a standstill for some years now. There is also a report that Messrs. Crawshay are in treaty for the sale of Treforest, and if such should prove correct prosperous days are not far distant for the Pontypridd valley. The Coal Trade throughout the district is in a fairly active state. Many of the colliers occasionally lose a turn, but upon the whole there is no reason to complain as regards the quantity of work; prices, however, are low, and there is no immediate prospect of much improvement.

The arrivals at Swansea include—the Claudine, from Caldera, with 430 tons of copper regulus, 260 tons of copper ore, and 16 tons of nickel ore, for H. Bath and Sons: Emily Walters, from Chanaral, with 730 tons of copper ore, for S. Walters; Mary Ann Johnston, from Taltal, with 540 tons of copper ore, for H. Bath and Sons; Acacia, from Huasco, with 525 tons of copper regulus, and 90 tons of copper ore, for H. Bath and Sons; Duke of Northumberland, from Cuba, with 624 tons of copper ore, and 16 tons of copper regulus, for the Cobre Mining Company; Chili, from Caldera, with 365 tons of copper ore, 125 tons of copper regulus, and 150 tons of silver ore, for H. Bath and Sons; Recovery, from Seville, with 140 tons of sulphur ore, for Richardson and Co.; Slains Castle, from Cuba, with 592 tons of copper ore, and 60 tons of copper regulus, for the Cobre Company.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 15.—The Iron Trade in both parts of this county is in a satisfactory position, although some of the makers of finished iron are not receiving so many orders as they would like. All appear to concur in anticipating a good demand for iron, and the reduction in the duties on the import of iron into Spain, noticed at length by your correspondent last week, will doubtless do much to stimulate the demand for iron for that country, which has for some time past been taking considerable quantities of British iron.

The following is a list of the BLAST FURNACES in operation in NORTH and SOUTH STAFFORDSHIRE and EAST WORCESTERSHIRE at the commencement of the present year:—

NORTH STAFFORDSHIRE DISTRICT.

	In.	Out.	Total.
Fenton Park Iron Company	1	1	2
Granville, Earl of, Shelton	7	1	8
Heathcote, J. Edensor, Apedale	2	2	4
Heath, Robert, Esq., Biddulph Valley	3	0	3
Kinnersley, T., Esq., Trustees of late, Clough Hall	4	0	4
No. Staffordshire Coal and Iron Co. (limited), Talk-o'-th'-Hill	0	2	2
Sparrow, W. H., and Son, Longton, Lane End	2	1	3
Silverdale Company, Silverdale	4	0	4
Williamson Brothers, Goldenhill	4=27	0=7	4=34

WOLVERHAMPTON AND BILSTON DISTRICT.

Addenbrookes, Smith, and Pidcock, Rough Hay	2	1	3
Aston, Isaiah, and Co., Wolverhampton	2	1	3
Bagnall, John, and Sons, Capponfield	2	1	3
Bagnall, John, and Sons, Gold's Green	2	1	3
Baldwin, William and Co., Bovereux	0	2	2
Bennitt, William, Oldbury	4	0	4
Blackwell and Co., Bilston New	0	5	5
Chillington Company, Chillington	3	1	4
Chillington Company, Moseley	0	3	3
Chillington Company, Bentley	2	0	2
Colbourn, J., and Sons, Horsley	4	0	4
Creswell, E., and Sons, Tipton	2	0	2
Davies, Bloomer, and Co., Pelsall	2	1	3
Hartland and Co., Hatherton	1	1	2
Firnstone, W. and G., Crook Hay	0	4	4
Fletcher, Solly, and Urwick, Willenhall	3	0	3
Gibbons, Benjamin, Bilston Brook	1	2	3
Gibbons, Benjamin, Millfields	4	0	4
Gibbons, W., Deepfields	1	2	3
Groucutt and Sons, Broadwaters	3	0	3
Hopkins, John, and Son, Dudley Port	1	1	2
Haines, J. and H. Willingsworth	3	0	3
Jones, David, Herbert's Park	0	1	1
Jones and Murcott, Bilston	0	3	3
Jones, John, Birchills	4	1	5
Lloyds, Fosters, and Co., Wednesbury Old Park	3	0	3
Mills, Samuel, Darlaston Green	3	0	3
Morris, Thomas, Park Lane	1	1	2
Osler Bed Iron Company, Osler Bed	2	1	3
Onions, W. J. and G., Stour Valley	2	0	2
Parkfield Company, Parkfield	5	0	5
Perry, F. C. (late), Roughwood	0	2	2
Roberts and Co., Tipton Green	3	1	4
Shale and Fowler, Barbor's Field	1	1	2
Sparrow and Co., Stow Heath	3	1	4
Stonefield Company, Stonefield	1	0	1
Thorneycroft, G. B., and Co., Bradley New	2	0	2
Turley, J. and T., Coseley	2	0	2
Williams, P., and Sons, Wednesbury Oak	2	1	3
Williams, P., and Sons, Union, West Bromwich	3	0	3
Williams, Brothers, Birchills	0	2	2
Ward, William, and Sons, Priestfields	2	1	3
Ward, William, and Sons, New Priestfields	1	1	2
Whitehouse, H. B., Priorfields	3=85	0=43	3=128

DUDLEY DISTRICT.

Blackwell and Co., Russell's Hall	3	2	5
Bradley, John, and Co., Shut End	2	2	4
Badger, T. and I., Old Hill	0	2	2
Cochrane and Co., Woodside	2	1	3
Dudley, Earl of, Coneygre	2	1	3
Dudley, Earl of, Level	3	0	3
Dawes, W. H., Withymoor	2	0	2
Evers and Martin, Park Head	1	1	2
Firmstone, W. and G., Oak Farm	2	0	2
Firmstone, W. and G., Lays	3	0	3
Griffiths, Samuel, Old Windmill End	0	3	3
Grazebrook, M. and W., Netherton	2	0	2
Gibbons, B., Ketleys	0	3	3
Gibbons, B., Corbyn's Hall, New	2	2	4
Hall, Holcroft, and Pearson, Brettel-lane	2	0	2
Hall, Holcroft, and Pearson, Old Level	0	2	2
Haden, William, Dixon's Green	1	0	1
Hingley, Noah, and Sons, Netherton and Dudley Wood	3	1	4
Mathews, William, Corbyn's Hall	2	2	4
New British Iron Company, Corngreaves	4=36	2=24	6=60

BLAST FURNACES IN SOUTH STAFFORDSHIRE AND WORCESTERSHIRE.

	In Blast.	Out.	Total.
1852	127	32	159
Sept. 1857	157	22	179
Dec. 1857	111	69	180
Dec. 1858	132	51	183
Dec. 1859	132	56	188
Jan. 1861	116	75	191
Jan. 1862	110	78	188
Jan. 1862	121	67	188

BLAST FURNACES IN NORTH STAFFORDSHIRE.

1857	20	8	28
1858	22	5	27
1859	24	5	29
Jan. 1861	24	9	33
Jan. 1862	23	11	34
Jan. 1863	26	8	34

The Hardware Trades of Birmingham and South Staffordshire are opening satisfactorily this year. There cannot be said to be any extraordinary demand for any particular market, but with South America, India, and Australia there is a good trade doing. The home demand is also pretty good, except for the Lancashire district.

The discovery of "Mining Records" at Broseley—well known for its pipes—is thus described in a local paper:—"Incidents have from time to time occurred to show that Broseley, at a very early period, was famous for its pottery, its pipes, and for mining operations carried on in its vicinity. Ground falling in has disclosed old shafts over which trees had grown, and where no pit had been suspected; wooden shovels, wooden rails, and similar appliances, common in mining when such operations were in their infancy, have been found now and then in old works; still more significant indications of the same thing, and probably of even still earlier phase, were found the other day upon the estate of Lord Forester in what is called the Dee-lip, or more properly called the Deer-leap. It appears that the men who have been employed for some years in getting coal, which those in former ages had left near the outcrop as not being then considered worth their trouble, came upon one of these workings. Five wagons were discovered, with wheels of wood, iron axle-trees, and brasses in which they worked. Unlike the wagons in use for the past century, and more in such districts, the wheels were flanged, as is the case with those on our modern railways, and fixed like them on the axle-trees, with which they turned. The brass sockets or guides in which they worked have the initials P. B. The question is whether these initials represent the name of a former owner of the estate, Philip de Benthall, who in 1280 granted a charter to the monks of Buildwas, and a right of road over his property for the carriage of timber, stone, and carbones or coal; and if so, these relics become interesting from antiquity, and as illustrating the early history of mining in this district. That coal was just then coming into use as a substitute for the fuel the woods of a former period supplied appears evident, from several notices we get of it in old deeds and charters connected with the county; as, for instance, when Sir John de Halston, 10 years later, gives license to dig for coal within the Cleo Hill forest; and in 1264, in which year certain items are entered by the Abbot of Wigmore as profits arising from a coal mine at Cainham, also from the first legal charter of which we have any record with respect to coal, granted by Henry III. to the inhabitants of Newcastle in 1234."

The enquiry as to the cause of the sad colliery accident at Prior's Lee, Shropshire, resulted in a verdict of "Accidental Death," the jury expressing their opinion that the spring-box which gave way had not been properly examined.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

JAN. 15.—The condition of the Iron Trade is somewhat languid, but its future prospects are encouraging, and generally it is in a sound commercial state. There have been less speculative purchases latterly than have ever been known in the previous history of the trade, and although the rates for the raw material have been exceedingly low, this has not had any material influence in fostering a speculative spirit. The demand for railway iron work is brisk, and it will require a very considerable period to complete the orders now given out for armour-plates. The Steel Trade is improving, and we have a better enquiry from the Continent for all descriptions of cutlery. The returns of the Board of Trade show a great falling off as regards the exportation of steel to America. The value of the total exports of steel for the eleven months of 1862 was 744,249*l.*, and for that period in 1861 it was 656,531*l.* The Coal Trade has shown considerable improvement of late, and all collieries have in consequence been working full time. The demand for coal has been very active during the past fortnight, and, were it not for the stagnation existing in the manufacturing districts, occasioned by the cotton famine, the trade would be in a very flourishing state. The great drawback is the delay which is experienced in getting sufficient wagons, owing to their being detained in London and other distant stations from South Yorkshire.

The new COAL-CUTTING MACHINE, now at work at the West Ardsley Pit, near Leeds, bids fair to occasion a complete revolution in the coal trade. The machine itself, the invention of a working collier, is a most simple one, but it does its work admirably. It is one of the simplest pieces of mechanism invented, and consists of an upright shaft, at the top of which is an arm, at the end of which is is an ordinary pick. The machine is worked by compressed air, which is forced down the pit, and communicates to the machine through flexible tubes. The machine itself moves on wheels to any part of the coal which is required to be cut, and its velocity can be increased or decreased at will. It occupies very little space in the pit, and it will do the work of 20 men or more. The arm at the top is moveable, and when the coal is cut above; it can be moved down so as to cut it at the bottom of the seam. No. the least important part of the value of this machine, is the fact that it makes little if any slack compared with what is done by coal got by hand power. The proprietors of the pit have wisely patented the invention, and as it is creating great interest in the coal trade, they have decided not to admit the public to view it except on Saturdays. There can be no doubt but that it will be adopted in most, if not all, the large collieries.

The recent accident at Clay-Cross, by the over-winding of a cage, has drawn the attention of coalmasters to the absolute necessity which exists for affixing safety apparatus in all shafts, in order to save life. A very excellent invention has been patented by Mr. J. Kaye Hampshire, of the Whittington Collieries, and it has been affixed to several pits with perfect success. It can be seen in daily operation at the colliery, and has prevented several fatalities. The Council of the School of Mines, in Jermyn-street, London, have purchased the model, which was shown in the Exhibition, and they have a very high opinion of its capabilities for the purposes for which it was designed.

A meeting of the liquidators in the Mill Town Mine, Ashover, which has just been wound-up under the Joint-Stock Act, was held last week, and, after the business had been concluded, a new company was formed for the purpose of raising capital to put the mine in working order again. The machinery is now being put in thorough repair, and it is intended to sink through the toadstone. The new company comprises several influential names, amongst whom we may mention Mr. Charles Binns, the late chairman and manager of the extensive works at Clay Cross, Mr. William Howe, engineer to the same company, and most of the principal shareholders in the late concern. We hold that the new company will make good progress, and if they do not get plenty of ore it will not be for the want of capital, energy, and enterprise.

On Monday afternoon a meeting of delegates from the branches of the Wigan Miners' Association was held at Wigan, to consider what course to adopt with regard to the application that had been made for an advance of wages. As it appeared that there was some question whether the notices were legal, the masters having refused to recognise them, it was decided that new applications should be made, under the sanction of the association, to the masters for an increase of 10 per cent. in wages. Fourteen days should be allowed for an answer, and in the meantime a decision could be come to by the men as to what course they would pursue if their request was refused. Work will proceed as usual till the end of the fourteen days. The men appear undecided what course to take should their request not be acceded to, as is almost certain to be the case. They say they have not struck, and that the feeling in favour of a stoppage of work is by no means general. Several of the leading members of the association are using all their influence to prevent a strike, convinced that the present is not the time for such a proceeding, especially as it would exercise a very injurious effect on the newly-fledged society. If the men do strike, they say, the fault will be that of the masters, for the rate of wages now is 10 per cent. below the rate of nine years ago, and 20 per cent. below that of eighteen months ago, whilst the price of coal is now 1s. 8d. per ton more than when the men received 10 per cent. higher wages.

Mr. J. Punshon, of Pemberton, has patented a balance cylinder with counter-pressure and the valves connected therewith for stationary and locomotive steam-engines, to prevent over-winding at collieries, to provide extra breakage power to locomotive steam-engines, and whenever steam is the motive-power to provide counter-pressure to stop instantly the action; Mr. Ferrar Fenton, of Mappleton, improvements in the manufacture of pulp for paper making and similar purposes; Mr. Dan. Dawson, of Milnsbridge Chemical Works, improvements in manufacturing Magenta colour or dye; Mr. Daniel Collinge, of Oldham, machinery or apparatus for cleaning and preparing cotton or other fibrous matter to be spun; and Mr. Wm. Tasker, of Waterloo Ironworks, Andover, improvements in the construction of harrows.

The local share markets are, so far as relates to mining stock, exceedingly dull. There is a brisk demand for bank and water shares, and a moderate enquiry for railway stock.

THE COLLIERIES AND MINES OF DERBYSHIRE.

There are 158 collieries in Derbyshire, and these have produced the following amount of coal:—

Sold ..... Tons	3,617,000
Consumed at ironworks	670,000
" limeworks	70,000
" collieries	90,000=4,447,000

The development of this mineral field is rapidly extending; many large collieries are being established, and the Midland Railway Company are aiding in this, by forming mineral branch lines into undeveloped districts.

METHOD OF EXTRACTING COAL AND IRONSTONE.—The coal and ironstone of Derbyshire and the Midland Counties are worked by the long wall system—the whole of the mineral is extracted at one operation. The roads are formed through the waste, or goaf (the part where the mineral is extracted), to convey the mineral from where it is worked to the shaft. These roads are formed by building substantial pillars, or walls, on each side, from 6 to 8 ft. apart, with the rock, or bind, found in the mine. The strata upon these pillars subside for some time after the mineral is extracted, which consolidates them, but reduces the height of the road, and this has to be maintained by blasting down the roof from time to time. When the strata have become consolidated, the road through the waste, or goaf, forms a more permanent road than coal would in the Derbyshire coal strata. This system of working coal is general in Derbyshire, Shropshire, and Scotland; but it is also adopted in the Nottinghamshire, Leicestershire, Warwickshire, and Somersetshire coal fields.

The coal and ironstone of other fields than those I have mentioned are worked by the pillar and stall system—by extracting from a quarter to half of the mineral at the first operation, making and maintaining roads in the coal for the conveyance of the minerals; and by a subsequent working, removing the coal before left. The long wall system, where it can be applied, is, in many respects, more economical and simple than the pillar and stall; the mineral is got out with less waste; and the ventilation is effected by simpler arrangements. The hard and tough character of the Derbyshire coal seams may have suggested this system of working, as it saves much labour, which, in working by pillar and stall, is considerable. A greater proportion of large coal is produced by the long wall system in Derbyshire than would be by the pillar and stall; and it is desirable to produce as much of this kind as possible, for the small coal of most of the Derbyshire seams will not coke; hence the small made in the mine is left there, and amounts to several hundred thousand tons annually. This is to be regretted; but as there is only a limited local consumption for the small coal, the sacrifice must be made. In Lancashire, where there is a large local demand for small coal, for engine purposes, it is brought out of the mine. The Derbyshire miners are generally good workmen, and bear a favourable comparison in intelligence with the miners of other coal fields. Unlike the colliers of other districts, they seldom leave their own county to seek work.

IRONWORKS.—The following is a list of ironworks in Derbyshire:—

Name of works.	Owners.	Furnaces built.	Furnaces in blast.	Furnaces in blast in district.
Alfreton	J. Oakes and Co.	3	2	—
Birmington Moor	J. Knowles	1	0	—
Butterley Park	Butterley Co.	3	2	—
Clay Cross	Clay Cross	3	1	—
Codnor	Ditto	4	3	—
Morley Park	Charles C. Disney	2	2	cold blast.
Newbold	S. Beale and Co.	1	1	—
Oakerthorpe	Oakerthorpe Iron Co.	2	1	—
Renishaw	F. R. and C. E. Appleby	2	1	—
Sheepbridge	Dunston, Barrow, and Co.	3	2	1 fur. cold blast.
Stanton	Crompton and Co.	3	2	—
Staveley	Richard Barrow	2	2	—
Unstone	Henry Rangely	1	1	—
West Hallam	H. B. Whitehouse & Sons.	3	2	1 fur. cold blast.
Wingerworth	Wingerworth Iron Co.	3	2	—
Wingfield	Messrs. Marshall	1	9	—
Total		37	24	

The total make of pig-iron in Derbyshire in 1861 was 129,715 tons.

Where care is taken in using the best materials of the Derbyshire coal field, the manufactured iron will bear comparison for quality with iron of any part of the kingdom for plates and sheets. The superior kind required by Government in the manufacture of armour plates and Armstrong guns is made from Derbyshire hot and cold blast pigs.

The increasing demand for first-class wrought-iron has directed the attention of Derby-

shire ironmasters to the make of cold blast iron (which has not been in demand until the last two years), but four furnaces are now making this kind of iron in our country. For many years the demand has been for cheap iron; but experience has taught many large consumers the fatal consequences of using an inferior quality.

Lead is the most abundant metallic mineral in Derbyshire, and copper and zinc ores are found associated with it. The celebrated Ecton Mine, on the borders of Staffordshire, near Hartington, is an exception; several hundred thousand pounds worth of copper ore have been extracted, from what was, in fact, a copper mine. This success has since induced many speculators to expend large sums in searching for copper, but without reward. The Ribden Mine, near Alton Towers, was many years ago opened for copper, and from time to time small quantities have been raised, but if it had been gold instead of copper it would scarcely have repaid the outlay. Yet fresh sanguine adventurers have from time to time taken up the search in hopes of discovering another Ecton deposit. At the present time some gentlemen contemplate further explorations, although it has recently been abandoned by a company. This is a type of many other adventurers after copper. In Australia, where there are the largest copper ore deposits in the world, the ore is found in the mountain or carboniferous limestone formation, the same formation as our Derbyshire limestone.—*Derbyshire Red Book.*

SOUTH WALES INSTITUTE OF ENGINEERS.

The quarterly meeting of the Institute was held on Wednesday, at the Castle Hotel, Merthyr Tydvil. The following gentlemen were present:—Mr. Thomas Evans, F.G.S., Government Inspector of Mines for the South Wales district, President, in the chair; Mr. Lionel Brough, F.G.S., Government Inspector; and Messrs. R. H. Rhys, Aberdare; A. Bassett, Cardiff; J. James, Newbridge; J. Moody, Cyfarthfa; W. Adams, Ebbw Vale; D. Davis, jun., Aberdare; W. Menelaus, Dowlais; R. Bedlington, Rhymney; G. Brown, Mountain Ash; F. Levick, jun.; M. Moxham, Swansea; — Maynard, Crumlin; W. Menelaus, Dowlais; George Parry, Ebbw Vale; Edward Williams, Merthyr; Walter Child, Dowlais; J. Naysmith, Aberaman; H. Hewitt, W. Brown, Nixon, Cope, Pearce, Martin, E. Brigden, H. Jones, Allen, James, Kirkhouse, and others.

In the room were several interesting maps and sections, illustrative of the long wall mode of working, a paper upon which was read by Mr. HEDLEY.

The PRESIDENT, in opening the proceedings, said it was a practice with his predecessors to review their period of office, and he should be glad to do so at the end of his term. He had one melancholy duty to perform, and that was to mention to them the death of Mr. Ebenezer Rogers, a gentleman who was connected with this and many other scientific societies in the country. He was one of the founders of this Institute, and he had occupied the position of president, and furnished them with many valuable papers. It was, therefore, a source of great regret to them that a gentleman who had been such a valuable supporter of the Institute had departed from amongst them.

After the usual preliminaries had been gone through, and Messrs. Robert Rickards, Cardiff; George B. Forster, Durham; John Daglish, Hetton; W. B. Monk, Bristol; P. Haggie, Gateshead; E. Daniel; and J. Naysmith, Aberystwith, declared members of the Institute, the discussion commenced on the papers read at the previous meeting.

Mr. Cox's paper "On the Selection and Treatment of Coal for the Blast-furnace and Cupola."—The PRESIDENT said that Mr. Cox was unwell, and as Mr. Child's paper was nearly on the same subject, the council thought it would be well to adjourn the discussion on the former paper. This was unanimously agreed to.

The writer of the paper, after glancing at the difficulties which formerly existed in the selection of coals by iron manufacturers and gas engineers, rejoiced that the chemist had now come to the assistance of the engineer, and by showing him the relative value of the combustible constituents of the different coals, had enabled him to see where his results fell short of the theoretic value. Iron was, in its early history, smelted solely by the charcoal of wood, and the iron so smelted is celebrated still for its great purity. All works celebrated for the excellence of their "pig" use some particular seam of coal for the smelting. Science may expose and remove deleterious influences in inferior iron, but the selection of fuel is as essential as the selection and treatment of the ores. Experience shows that when the sulphur is in connection with iron, the process of coking does not totally discharge it; and although watering the coke, when hot, will evolve a part, still a considerable quantity will remain in the coke, sufficient to act most injuriously on the iron. After explaining a series of experiments made in 1839–40, on the Great Western Railway, Mr. Cox stated that it was clearly proved that, during the process of coking, part of the nitrogen of some coals does unite with carbon, and form cyanogen, instead of following the usual course of uniting with hydrogen to form ammonia, and, therefore, the inference is that certain coals contain in themselves the germs of a power of rendering innoxious a portion of the sulphur they contain, the generation of which power is to a great extent under control. Cyanogen has long been known to exercise an influence upon iron, as evinced by its converting the surface of it into steel in the process called case-hardening, and it is more than probable that it may exert a beneficial power even greater than is now attributed to it, and it may not be considered presumptuous to suggest that it may possibly exert a similar desulphuretting influence on the iron itself, as it it does on the coke from which it is produced. The conclusion, therefore, is that as cyanogen, when produced, evidently unites with sulphur when present, it is obvious that the less sulphur than remains in the coke the larger will be the amount of cyanogen which will be left free to perform whatever beneficial effect it may be able to exercise on the iron itself, and that, therefore, no pains should be spared to dispel as much of the sulphur as it is possible, by other means, such as by watering the coke in the oven at a high temperature.

Mr. H. T. James's paper "On Mining in the County of Leitrim" was next taken into consideration. He remarked that a bed of coal not exceeding 2 feet in thickness has been worked for some considerable time on the brow of a mountain at a great height above the level of Lough Allen and about five miles from Drumkeerin. The coal is unsystematically worked upon something like the Scotch method. No pumping is required, the mines draining by a natural level; no blasting is required, and a miner will cut through a yard of level in a day. Mr. James hopes that at some future time a discovery of thick seams of coal may be made in Ireland in defiance of the theoretical calculations of geologists. The discussion was adjourned, Mr. Bagot stating that he had been engaged in the district some time since, and that Mr. Thomas Guest had written a report on the identical spot 50 years ago, so that some interesting information could be collected.—Mr. E. WILLIAMS said that, at their last meeting, Mr. Bagot, of Llanelly, promised to get sections, and he had managed the mines spoken of. That gentleman, however, wrote to him a few days ago, stating that he could not get the sections.

Mr. Waring's paper "On Coal-cutting Machinery."—The PRESIDENT said that Mr. Waring was not able to be present, as he was in London on some important business. Mr. Waring refers to the present system of working coal, which is termed "un-mechanical application of power," and which is condemned by the writer; first, in the great loss accruing in cutting the coal by the proportion of the coal seam hewed away in getting the remainder; secondly, by the quantity of worthless small produced; thirdly, by the quality as to size of the coal being poorer than if worked by a better method; fourthly, by the use of gunpowder, which shatters the coal; fifthly, by the irregular lumps of coal occasioning more space in stowage than if worked in cubical forms; and, sixthly, by the increased general charges. The power recommended for adoption is that of compressed air, which assists the ventilation of the colliery at the same time that it does its work. The difficulties of introducing such coal-cutting machines are the expense attendant upon experiments; and, secondly, the prejudices of the colliers; but the writer did not despair but that eventually some means would be found of practically bringing machinery to bear on the working of minerals.

Mr. JONES, Wedgebury, said he had had no time to study the paper, and consequently had nothing to say on the subject. They had no coal-cutting machine in his district.

Mr. MENELAUS said that a machine had been invented in the North of England which was more likely to succeed than Mr. Waring's. He thought that the machine described in this paper was too complicated to become of practical use. The only way to secure something that could really be effectually worked was for the coalmasters to subscribe (say) 1000*l.*, which would be given as a premium for the best invention. He had no doubt but that the thing would be taken up then with proper spirit. Mr. Waring's principle virtually was an horizontal boring-bar, driven with an engine worked by compressed air. Colliers were now getting scarce, and more difficult to be managed daily. He believed that the principle would succeed, and although, in his opinion, Mr. Waring was proceeding on a wrong idea, yet he deserved great credit for his exertions. He (Mr. Menelaus) felt considerable interest in the matter, and he would do everything in his power in order to secure the success of the principle, but unless the coalmasters took the question in hand in the mode in which he had hinted, they could not expect to arrive at much good.

Mr. KIRKHOUSE mentioned several great difficulties in the way of introducing a machine, more especially in mixed coal.

Mr. BASSETT said, as it was proposed to use compressed air, he should like to know of Mr. Menelaus what had been the result of using that power at Dowlais?

Mr. MENELAUS replied, that they had used compressed air at Dowlais with success, but it was rather expensive in some instances. Supposing that they had a pit 150 yards deep, and a drift of 800 yards from the bottom of the shaft, then if it were indispensable that they should pump out the water by machinery from the deep, compressed air would be found a valuable power. The average cost would be about four times as much as steam.

Mr. R. H. RHYS thought the labour market was not yet sufficiently ripe for an improvement of this nature. If the long wall system were adopted, he did not see the necessity of machines. The more they tried the long wall in this district the more they liked it. They had abundance of colliers for every purpose at present. His own opinion was, that a machine would be too complicated and expensive to become of practical use.

Mr. MENELAUS thought that coal would ultimately be cut by machinery. Within the last few year agriculturists had been able to supersede manual labour by machinery in more difficult matters, comparatively speaking, than coal cutting. A far greater advancement had been made in this respect amongst the cultivators of land than amongst colliery proprietors. As he had previously stated, it was a question entirely for the coalmasters themselves. He must admit, however, that he should not like to make the experiment.

Mr. BROUGH said another century would elapse before machinery could be practically introduced in cutting coal. The mandril in the hands of good men would be the best means of coal getting for a long time yet. Machinery would interfere with the ventilation and working of a pit, and in his opinion the proposed improvement would be absolutely impracticable in the narrow passages of coal mines. Whether steam or compressed air were the power used, both would injuriously affect the ventilation and dispatch of a colliery.

Mr. HEDLEY had no doubt but that the mechanical difficulties could be overcome; but as to bringing the machine into practical use was another question. He thought it was more applicable to the pillar and stall mode of working than to long wall. He did not see how it could be introduced into the latter, as holing was the principal work; and he questioned whether any machinery would lessen the expense of holing. The inventor of the North of England machine, already referred to, communicated with him some time ago, in reference to aiding him in carrying out the invention. He, however, saw so many difficulties in the way, that he expressed a decided opinion that the thing was impracticable in the way proposed.

Mr. MENELAUS said he should be sorry for it to go forth as the opinion of this meeting that the matter was impracticable, and that it ought to be shelved, and was not worth trying. All the difficulties raised could be overcome by degrees, and he was rather surprised to find Mr. Brough expressing such a decided opinion.

Mr. BROUGH remarked that he only postponed the introduction of the machine. He did not think that anyone present that day would see it in practical operation.

Mr. RHYS questioned whether it could be adopted in this country, but it might in countries where colliers were scarce. The cost of cutting coal was too low in this country for it to be introduced.

The PRESIDENT was of opinion that coal would be cut by machinery at some future time. He could not see greater difficulties than were experienced in the introduction of agricultural machines.

Mr. BROUGH: The agriculturist has the heavens above for a canopy, instead of a bad top to interfere with him.

Mr. BASSETT said they were very much obliged to Mr. Waring for his excellent paper. He should be glad if they could have a paper from the inventor of the North of England machine.

Mr. HEDLEY said the inventor was Mr. Donnisthorpe, of the Balaclava Colliery, and he would communicate with him before the next meeting, and get a description of the machine. As to the power to be used, he might mention that he lately read a paragraph stating that a Frenchman carried a little machine in his pocket of no less than 40-horse power. (Laughter.)

Mr. JONES (Wedgebury) had not the slightest doubt but that a coal-cutting machine, like everything else, would be forthcoming when indispensably necessary.

Mr. BEDLINGTON observed that they must understand that the machine was not to do everything. The men would afterwards have to gob the rubbish and many other things which the machine could not do. Compressed air was an expensive power, and considerable outlay would have to be incurred, under certain circumstances, in keeping pipes in order. He apprehended the cost would be the main question to be considered.

A vote of thanks was then unanimously accorded to Mr. Waring, for his interesting and valuable paper.

The next discussion was upon Mr. Parry's Paper "On Puddled Steel," in which he states that the essential difference between steel and cast-iron is that the latter contains about three times the amount of carbon; but there are other impurities which must also be expelled. The discovery that the best German steel contains iron, 96·84; carbon, 1·0; manganese, 2·16=100, led to the adoption of Heath's process. Mr. Parry considers Riepe's process objectionable, and Spence's two fire-places unnecessary. The reason that good steel cannot be obtained from working refinery metal is that so high a temperature is required in the puddling-furnace that too much carbon is removed; but, perhaps, an improved puddling-furnace might be devised. The stahlstein steel is highly spoken of. With regard to the fusion of steel without crucibles, Mr. Parry remarked that he had good reason for stating that there is no difficulty in effecting the fusion and carburation of wrought-iron.

Mr. MENELAUS observed that a cheap method of producing good steel would effect a complete revolution in the iron trade.

Mr. E. WILLIAMS asked several questions in reference to certain points connected with the subject, which were replied to by Mr. Parry.

Mr. MAYNARD said he should be glad if some experiments were made as to the tensile quality of steel. What they now used for making bridges would bear a strain of about 36 tons to the square inch. It would be a very important matter if steel could be produced to stand about 40 tons to the square inch, and that at a cost of something like 20*l.* per ton. They would then be able to increase their bridge spans to 600 feet, instead of being confined to about 400 feet, as at present.

Mr. LEVICK, jun., said they had produced cold-blast iron at Blaina that would bear 33 tons to the square inch.

Mr. ADAMS remembered having had a conversation with two Prussians, and they said that a metal was produced in Prussia exactly the same as what Mr. Adams showed them as puddled steel, which they called fine-grained iron. That could not be used as their puddled steel.

Mr. MAYNARD showed a specimen which broke at a pressure of 36 tons to the square inch.—In reply to Mr. ADAMS, he said that a piece of it had been tempered, but he did not know what it would cut.

Mr. MENELAUS said that what they wanted was puddled steel about twice the strength of iron. He thought that puddled steel could be produced to bear 40 tons to the square inch at a moderate rate. He believed that, before many years were over, all their rails would be made of cast-steel.

Mr. ADAMS: Did bridges too. There was no machine to test puddled steel in the district, and he had sent a few samples to Mr. Fairbairn, but he had not heard the result.

Mr. MENELAUS said Mr. Parry had compiled a valuable paper, and perhaps he would tell them what he had done in the making of cast-steel.

Mr. PARRY replied that they had made but few experiments at Ebbw Vale. He had promised in his present paper to contribute another paper on cast-steel, and he should endeavour to do so by a future meeting.

Mr. MAYNARD entered into further explanations respecting the question. He did not think that steel would be used for all bridges, unless the price came down to that of iron. What they wanted was a metal sufficient tensile strength that could be manipulated like iron.

Mr. GEORGE BROWN asked if it would be advisable to make chains to carry the colliery cages of steel?—Mr. MENELAUS recommended it for trams; but he thought it would not suit for chains, in consequence of the welding.

Mr. JONES remarked that they were about introducing the very thing spoken of in Staffordshire, but not at the price suggested by Mr. Maynard. They were proceeding on Bessemer's plan, which had proved highly successful at Sheffield.

Mr. ADAMS, in reply to Mr. Bassett, said the reports which they received from various parties, as to the comparison of steel and iron rails, were conflicting. At Ebbw Vale they had puddled steel rails down for four years and a half, at a gradient of 1 in 40, and there was but little wear to be seen. Cast-steel rails had been down on the Midland Railway for five years, and engines passed over them 700 times a day, but no perceptible wear was yet seen.

The discussion closed with a unanimous vote of thanks to Mr. Parry, for his excellent paper.

Mr. Child's Paper "On the Selection and Value of Coke," was next read. He said that a judicious selection of coal for smelting purposes depended upon three conditions—their freedom from sulphur, their physical character, and the amount and nature of the ash they contain. This paper being a purely scientific one, was ordered to be printed, and the discussion was adjourned.

In a Paper "On the Long Wall System of Working," Mr. Hedley stated that this system was almost in universal use in the districts of Derbyshire, Leicestershire, Nottinghamshire, and Warwickshire, and not only so, but universally approved of. The practical benefits derived from this system are—the ventilation is improved, and far more efficient in comparison with the pillar and stall system, the current of air being carried through the working places without the use of bratticing; secondly, more large coals are produced in strong seams, and at less cost, than by the pillar and stall system; and thirdly, the upper seam of coal is less injured by the working of the lower in the long wall system than by the pillar and stall system. Mr. Hedley had prepared diagrams of the mode of working, and a geological section of the Derbyshire seams, with which he illustrated his paper.

The PRESIDENT asked if any member wished to ask Mr. Hedley any questions. Mr. Hedley had kindly promised to attend their next meeting, and he thought it would be better to adjourn the discussion. If any member apprehended he would not be present then, he might ask whatever questions he liked.

Mr. BROUGH said that a more important paper had never been before the Institute, and it deserved their most serious consideration. It was impossible to discuss it at the present meeting, and he agreed with the President that it would be better to adjourn the discussion. He trusted that Mr. Hedley would reduce the drawings, and then they could have copies with the next quarterly report.

Mr. NAYSMITH said expense was everything at the present day. He had tried the long work in Wales, and he always found the cost more than by pillar and stall. There was a great prejudice against it in Wales. Mr. Naysmith enumerated several difficulties which he had met with.

Mr. BROUGH, in reply to Mr. Naysmith's observations, said that all the difficulties had been overcome at Blaina and Cwmcelyn, where all the collieries were exclusively worked on the long wall system.—Mr. LEVICK, jun., corroborated Mr. Brough.

Mr. BROUGH said Mr. Bedlington had successfully adopted the long wall at Rhymney. He believed the day was not far distant when every colliery in Wales would be worked by long wall.

Mr. RHYS differed from Mr. Brough. Long wall might be extensively adopted in the thinner veins.

Mr. BASSETT said the Rock vein at Risca, about 4 ft. 6 in., had been worked by long wall for some months, and the manager informed him that a larger quantity of coal had been got out at a less cost.

On the proposition of Mr. MOODY, seconded by Mr. BROUGH, a hearty vote of thanks was accorded to Mr. Hedley.

The proceedings then terminated. Afterwards the members sat down to an excellent repast at the Castle Hotel, and the usual loyal and other toasts followed.

MINING IN AUSTRALASIA—MONTHLY SUMMARY.

MELBOURNE, Nov. 26.—The hot weather set in fully six weeks earlier than usual, and the genial rains of spring, with which this colony is usually supplied so abundantly, passed without falling, so that we have now experienced nearly three months of drought. The stoppage of mining, or washing out gold, in many of the alluvial districts is, consequently, almost suspended. For the season, the weather has been very hot and oppressive; but, as generally happens in similar seasons, we may expect heavy floods towards Christmas. Unless a change of weather quickly occurs, I anticipate that many hundreds of the unemployed alluvial miners will cross over to New South Wales, especially to the Lambing Flat district, where the sinking is easy, and the supply of water abundant, or to New Zealand, where the last accounts received are much more encouraging.

The following items show the quantity of gold received by Government escort from Jan. 1 to Nov. 20, in each year of 1860, 1861, and 1862:—1860, 1,794,051 ozs.=7,176,204*l.*; 1861, 1,664,235 ozs.=6,656,940*l.*; 1862, 1,380,754 ozs.=5,523,016*l.* Thus, the yield of gold for the year 1862 will, in all probability, barely exceed 6,000,000*l.*, a sad falling off when compared with the magnificent yield of 1852, which exceeded 17,000,000*l.*, with a population of about one-third.

New Zealand stands out in startling relief when compared with the gold returns of this old established gold-producing colony. The total quantity of gold shipped from New Zealand from the commencement to the present date, a period of sixteen months, is 516,483 ozs.=2,065,932*l.* The following statistics are the gold shipments for the last eight years, from Jan. 1 to Nov. 20 in each year:—1862, 1,468,969 ozs.=5,899,623*l.*; 1861, 1,725,885 ozs.=6,903,284*l.*; 1860, 1,923,282 ozs.=7,694,351*l.*; 1859, 2,055,789 ozs.=8,227,246*l.*; 1858, 2,290,936 ozs.=9,150,316*l.*; 1857, 2,514,429 ozs.=10,013,923*l.*; 1856, 2,588,587 ozs.=10,379,144*l.*; 1855, 3,433,306 ozs.=13,543,620*l.* From these returns it appears that the yield of gold has decreased more than one-half during that period. Quartz mining is progressing satisfactorily, and the quantity of stone reduced by the mills is as great as usual; but the large returns of gold which we have hitherto chronicled have not been so numerous. The reef which is at present producing the largest returns of gold from individual quantities of stone is situate at Dunolly, and is called the Arcadia reef, 3 tons having yielded 911 ozs. of gold. The last yield reported from the Pyrenees reef, in the same district, is 100 ozs. 5 dwts. of gold from 5 tons of stone. Mariner's reef, in the Maryborough district, has become famous for the depth to which shafts have been sunk on it; 1000 tons of stone raised from one claim at that depth having yielded 543 ozs. of gold. In the Bendigo district 4 tons of stone from the Exhibition reef produced 103 ozs. 2 dwts., and another lot, 34 tons, from Wallace's reef yielded 130 ozs. of gold. A reef on the Upper Gouldbourne, with very rude machinery, produced, from 165 tons of stone, 1734 ozs. of gold. The neighbourhood of Dunolly has been the most generally productive of nuggets, the three largest found there during the month weighing respectively 57, 30, and 21 ozs. At Tarnagulla a party of Chinese turned up, in old worked ground, a piece of quartz which contained 48 ozs. of gold, and a nugget weighing 19 ozs.

C. LEICESTER, C.M.E.

ADELAIDE, Nov. 26.—Copper: There is an advance of 3*l.* 10s. to note in this article since the last advices were received. It is now worth 91*l.* per ton at the port.—Coals: Arrivals have been very numerous, and prices have declined a trifle.—Metals: The market is fully supplied, and our quotations are with difficulty obtained.—Oil: Camphine continues scarce; but it is rapidly going out of use, the rock oil and other sorts having taken its place. Paraffine is very dull, and prices lower than ever. Whale and paint oils are in good request.

GREAT NORTHERN COPPER.—The local committee state:—"The favourable account of the Nuccaleena Mine, transmitted by the last mail, has been fully borne out by the result of subsequent operations. It will be seen from Capt. Morrison's report that the winze in the 10 is down more than 6 fathoms, and has yielded about 2 tons of ore to the fathom. A sample of ore from the first 100 bags has been assayed, and yielded 26¾ per cent. of copper, and a sample taken 14 ft. below the bottom of the level produced 55 per cent. Ore of a still richer quality has since been obtained lower down, but the committee have not yet had it assayed. As the discovery of a lode which is likely to prove permanently productive is an important era in the company's operations, the directors may probably wish to see some of the ore that is being raised, and the committee, therefore, forward by the mail steamer a box of samples."

YUDANAMUTANA COPPER MINING COMPANY OF SOUTH AUSTRALIA.—The directors have received advices from their superintendent, dated Adelaide, Nov. 27. He states—"I have shipped in the *Alwynton*, as per bills of lading, 120 tons of ore, and have engaged freight for a further quantity of 200 tons per *Sea Snake*, and hope to forward bills of lading for same by next mail. I enclose Capt. Anthony's report, which needs no comment from me, further than saying that he gave the different properties a most searching examination for several days." Capt. Thos. Anthony, the mining captain sent out by the London board to inspect and report upon the Yudanamutana Mines, under date of October 27, reports as follows:—"Section 135A, Yudanamutana Proper: These mines are situated mostly in a large basin formed by a number of hills which surround it, presenting a rather peculiar but not uninteresting appearance, especially to the miner, as he can trace copper ores cropping out of the ground on almost every ridge of rocks. He passes over the tops and down the sides of the hills, and these surface indications are again traceable to good and well-defined lodes into the valleys below; indeed, you cannot but be impressed with the idea that the flat forming the bed of the basin is the seat of an extraordinary deposit of copper. The stratum is, generally speaking, mica-schist, and is of a mineral-bearing character.

This is the section in which the large masses of copper were found cropping out on the top of the low hill on the western side of the basin. Here there is a north and south lode, and also a caunter lode. The north and south lode is as properly defined a lode as I ever saw in England. No. 1 shaft is producing 4 tons of first-class ore per fm. of 40 per cent. In No. 2 shaft and winze no less than 300 tons of copper have been raised, 200 tons of which is first-class, of about 40 per cent., and 100 of 20 per cent. Section 135B (Wheal Gleeson) is to the north of section 135A. There are several lodes visible on the surface of this section, and these are traceable as far as the ridges of rocks crop out. Only one of these lodes has been worked.—Section 285, Martichudsna Mine: Here surface indications are quite equal to those in Wheal Gleeson, and demand immediate attention.

Section 285: Here the surface indications are quite equal to those in 135B, and demand immediate attention. The copper ridges of this section pass into section 1396 on the north, and 1397 on the south, making three very important sections.

Section 1398 stands on the eastern side of the three last-mentioned sections. The surface indications in this section are excellent, and would have been worked before this time had we a sufficient number of huts to accommodate miners; but as many have been erected as could be in the time, and more are now being erected.

Sections 1393, 1394, and 1395 are on the western side of sections 135A and 135B. They all contain copper at surface, but no trial has been made of them, for the reason above given.

Section 1407 is in a line with the Standard lode, running through section 135A, and the surface indications are traceable into it. No work is yet done here.

Wheal Blinman: The workings extend about 80 fms. in length, and in one place 20 in depth. The lode is from 4 to 10 ft. wide, and rich throughout; indeed, it is a mass of rich copper ore. We have sent to Port Augusta, from this mine, 241 tons of ore, which I judge, from the assays taken, and the present low price of copper, will realise about 30*l.* per ton. We have on the mine about 60 tons of the same class, chiefly in smalls, the whole of which would have been ready to send to the port had we had water to draw it. We have about 60 tons of about 15 per cent. ore dressed ready for smelting, and about 300 tons of the same class at the surface to dress.

I have now seen the whole of the company's property in the colony, and I can assure you it gives me a great deal of pleasure to inform you that I am highly pleased with it. The various sections have far exceeded my expectations, and I cannot speak too highly of them. The future must speak for itself, but at present the prospects of the mines are the best that can be. I have carefully examined the places from which the ores have been raised, and the ores now in sight, and I believe the mines were never in a better state than at the present time, and are likely to be so for many years to come. I have no doubt we shall have some of the best mines in the world."

NORTH RHINE COPPER.—The lode in the present end, in the 60, is about 18 in. wide, and contains mundic and black ore of low percentage. Although the lode is small and poor at this point, there is a great improvement in the nature of the lode since my last report. The lode in the bottom of the 43 fm. level winze is about 5 feet wide, and contains mundic and black ore; the lode is likely to yield a large quantity of copper ore of low percentage when it is laid open for tribute pitches.

KAPUNDA.—The quantity of ore raised in September was 242 tons, of 18¼ per cent. average produce, equal to 44¾ tons of pure copper, and the quantity raised in October amounted to 233 tons, the average produce of which had not been finally determined. In the absence of the October letters the directors are not able to state accurately the details of the copper shipped since the September advices, but the quantity appears to have been 116 tons. The mining and smelting operations generally were progressing satisfactorily.

THE BON ACCORD COPPER.—The directors have received a communication from the committee of management at Adelaide, dated Nov. 26, with reports from the mine to the 21st of that month. The duplicate of the despatches which left the colony in October, and were lost in the steamer *Colombo*, will arrive, *via* Southampton, in the course of a few days. The explorations carried on at the east side of the property, and which have all been at the water level, or about 24 fms. deep, had not resulted in the discovery of paying ore in quantity. The only exploratory work in progress was in the level west, at 24 fms. deep from the shaft No. 1, recently opened on the east side of the property; but, in the absence of the October reports, it is difficult to determine accurately what was the prospect of the mine. The committee were about to visit the mine again, with a view to see the result of these particular workings, and to resolve upon their future course. The mining captain recommends, in the event of these workings resulting in no discovery of ore, that the engine should be started again, and operations recommenced under the water level on a larger scale; but upon this subject the board have written very fully to the committee, and they will not sanction it, unless they shall be most thoroughly convinced that such a course would lead to success, and not involve any very large expenditure.

WORTHING.—Capt. T. Prisk (Nov. 24) reports "The mine never looked so promising as at present. Legg's engine-shaft has been sunk during the month 9 feet, and the lode has very much improved, but as the part of it which carries most ore is gone out of the shaft we shall not reap much benefit from it until the shaft gets down to the 53, when we shall be able to drive through it, and take it away to the best advantage. The lode is composed of rich yellow ore, mixed with mundic and quartz. The size of it I cannot tell, but this I can say, it is a very large and well-defined lode, which promises to yield its thousands of tons of ore below, if properly developed. The 43 fm. level end also appears to be improved, the lode appears to be enlarging and yielding some very good yellow ore. The cross-cut east to meet with the flookan has not, so far, been successful, but we have cut a large stream of water, which is draining the 33 fm. level very fast, which will be of great advantage to us in sinking winzes through to the 43 fm. level. The caunter is not quite so good as when I last wrote, but still I believe there is a good lode ahead of us, from the appearance of the country about this part of the mine. The stopes throughout the mine look as good as ever, with the exception of what has been taken away. On the whole, I consider the mine is looking well, and likely to make one of the largest and also one of the most productive mines in the colony. The ore raised in the mine during the month is 165 tons, of about the average produce. The quantity of rough copper from the furnace has not been so much as we should have had, owing to the furnace bottom giving way, hence we have a large stock of regulus on hand, so that we expect this month to make a large quantity of copper. The engine and dressing machinery is in good working order, and the dressing and other surface work going on satisfactorily. I forward you by the mail a stone of rich yellow ore from the bottom of the engine-shaft, 50 fms. in depth."

The directors have received advices to Nov. 26, which state that the engine-shaft was down to the 50 fm. level, and in sinking they had come upon solid ore, a specimen of which is expected *via* Southampton. The ore raised during the month was 166 tons, of the usual average quality, and the captain reports the prospects most cheering, never better, and he had no doubt that the Bremer would prove, in fact was, a most productive and lasting mine: the outlay for the month was 136*9l.* 7*s.* There are 50 tons of regulus and a good stock of ore on hand, and 18 tons of copper would be shipped by the *Murray*, for which freight was arranged at 20*s.* per ton.

FORTUNE COPPER.—During the present month 40 tons of copper ore and 29 tons of lead ore have been carted to the bay; the quantity would have been larger, but in consequence of the teams being required for getting in the harvest, it has been impossible to obtain additional means of transport. The men are still employed on the ore floors, and in raising ore from the back of the 8 and 20. On the 31st ult. 223 tons of copper ore and 190 tons of lead were at Champion Bay, awaiting shipment.

ENGLISH AND AUSTRALIAN COPPER.—There were four furnaces and one refinery at work at the Port Works, and three furnaces and one refinery at Kooringa. Another furnace which had been let out for repairs would shortly be re-lighted. The quantity of coal at Kooringa was 440 tons; at Kapunda, 1,022 tons; and at Port Adelaide, 945 tons, besides 2000 tons of fuel at Kooringa. Shipments of copper, both to India and England, were proceeding satisfactorily.

GREAT BARRIER.—The manager reports the progress made in the erection of the saw mill as most satisfactory. The whole of the work so far has been executed as well as it possibly can be, and is of the most solid description. It is expected that the mill will be ready to be worked by the middle or end of March, or it may be sooner. The manager proposes to have not less than 500,000 feet of timber ready for the mill as a commencement. With regard to the farms, the sheep are increasing considerably in value, both as to quantity and price. The question of the Panama route is again being generally agitated in the colony. It is considered that Port Fitzroy, on the Great Barrier Island, would be in the most direct line of route as the port of call for New Zealand. The local papers give a report on the subject by Colonel Smyth, who states that the direct line from Sydney to Panama, *via* Auckland, would be augmented by about 100 miles by the necessity of having to round the northern extremity of New Zealand. It appears that 50 miles of this would be saved by having the terminus at the Great Barrier Island (say at Port Fitzroy); and moreover the risk, difficulty, and delay of having to navigate the narrow entrance to the Waitemata would be avoided. This to a large ocean steamer would be of great importance. The manager of the company considers that no other port in New Zealand offers such facilities for the suggested line of steamers to call at. He adds that Port Fitzroy would easily float the *Great Eastern*.

TALISKER SILVER-LEAD.—A shipment of 30 tons of rich silver-lead ores, per ship *Murray*, to London, will, it is hoped, prove an auspicious commencement of a new realisation. By the same coasting vessel which brought up the 30 tons from Talisker, the proprietors in Adelaide have received a ponderous lump of ore, weighing nearly 5 cwts., part of a huge block too heavy for removal with present local appliances. This lump of ore is said to resemble the rich silver-lead of Belgium, yielding 75 per cent. of metallic lead, and more than 60 ozs. of silver per ton of ore.

DUN MOUNTAIN COPPER.—Recent reports have informed you of the very rich and extensive deposits of chrome discovered and partly stripped, both above and below the line (samples of which were sent to London *via* Sydney), and I have now the pleasure of informing you of the discovery of an additional deposit of chrome, of good quality, not far from reef No. 2 (M'Quillam's), which latter has already produced over 1500 tons of extremely fine chrome. As this newly-discovered deposit was only struck in one of our drives last week, its extent is yet undetermined. I may say in passing that it lies near to the shoot down which the ore from No. 2 reef is brought to the railway wagons, so that the expense of erecting a shoot to it will be avoided. We continue our shipments of chrome ore in considerable quantities, as you see by our statement herewith, and the wool season being at hand, we shall not experience any difficulty in obtaining vessels. It will be satisfactory to you to know that we still continue to come across veins of copper ore, some of which are apparently very rich, yielding, as per Sydney analysis, from 19 to 30 per cent. of copper per ton, and we now hope these veins will lead eventually to decided deposits of copper in quantity. As you are aware, our wood business is doing very well indeed, considering that we have commenced it at the worst season of the year—viz., the spring. I have no doubt that on the year we shall derive a nett revenue of at least 1000*l.* from this source; our omnibus brings us in 300*l.* a year nett, as you know. We have the pleasure to be able to say that now all the buildings so necessary for the workmen, stock, and plant, &c., of the company are completed,

and that everything necessary for economical and safe working of the railway has been provided. The railway rolling stock and horses, as well as the plant of the company generally, are in first-rate order, and the chrome, wood, and passenger traffic continue to be worked with regularity and safety. We may say, in confirmation of this, that there were only two days during the past winter, comprising some very severe weather, upon which the wagons did not run up to the mines. The drafts advised this mail are considerably reduced.

SCOTTISH AUSTRALIAN.—The directors have received communications from the superintendent, dated Oct. 22 and Nov. 26 last, bringing two months' advices from the Cadiangullong Copper Mine, smelting-works, and the colliery.—Cadiangullong Mine: During October and November little was done at this mine in the way of raising ore from the stopes, the principal object of the workings carried on during the time being to ascertain the character of the lode at the depth of 23 fms. The engine-shaft having been sunk to that depth, the southern wall of the lode was reached after driving northward 21 ft. from the shaft; the lode (which at a higher level has been proved to be of the great width of 70 ft.) had been driven into to the extent of 24 ft.; this driving first passed through mundic, with occasional stones containing native copper, then through jointed ironstone, with native copper in the joints, and in some cases disseminated throughout the stone, and in the last portion of the 24 feet driven green carbonate and red oxide of copper were met with. At this stage a considerable influx of water took place, supposed to be the result of draining the higher levels, and as the complete erection of the large engine intended ultimately to work the mine had, from prudential motives, been postponed until the lode had been thoroughly proved in depth it became necessary to procure a portable engine to draw off the water, so that the cutting through of the lode at the depth of 23 fms. might be completed, and the shaft sunk and the lode cut through and examined again 10 or more fathoms deeper, the mining captain not yet being satisfied with the appearance of the lode so far as penetrated at the depth of 23 fms. A driving had also been carried east and west at the same depth near the south wall of the lode; this part of the lode was promising for copper, but samples of it, and of portions of the lode taken from near the surface, and from the northern extremity of the 21 feet driven into the lode on being assayed at the mint in Sydney were unexpectedly found to contain gold: on this point, however, further information must be obtained before any conclusion could be safely arrived at warranting the expectation of gold being found to exist in paying quantities. The small portable engine could be readily obtained in the colony for about 300*l*.

Smelting Works: Captain Christoe reports that he had dispatched over 12 tons of refined copper to Sydney, for shipment to England, and that he expected to make up the quantity to 40 tons before the end of December last. The furnaces continued to work satisfactorily.—Colliery: All the works necessary for the production and conveyance of coal are being proceeded with in the most satisfactory manner. The colliery viewer reports that he is raising coal of first-class quality, that he is perfectly satisfied with the progress of the entire works, and that the colliers he has under him are of a very good and reasonable class of men. He estimated that 50,000 tons of coal will be sold during the first, and 100,000 tons during the second year, from the working of the pit already opened, expecting by the end of the third year to have another and much larger pit opened, adding "that at the end of five years we may very reasonably expect to vend a very large quantity of coal." The following are extracts from the letters of Mr. Morehead, the superintendent:—"Assays of Ores for Gold: Having had it suggested that the Cadiangullong ores, particularly those near the surface, containing much iron and gossan, or oxide of iron, were very likely to be auriferous, I submitted samples of the poorest of these ores (for copper) to Mr. Watt, a chemist, recommended to us by Professor Smith, of the Sydney University, and to the Sydney branch of the Mint for assay for gold. I at the same time handed, for a similar assay, specimens obtained from a singular yellow course of ground or lode (its yellowness arising, we were satisfied, from its containing a large quantity of sulphur) which had often attracted our notice in the neighbourhood of Cadiangullong. The results of these assays are contained in the reports, of which copies are sent herewith, specimen No. 1 being a portion of the Cadiangullong ore, while No. 2 was a portion of the formation last referred to. Prof. Smith, of the Sydney University, considers the Mint assay quite worthy of reliance." * * *

"The Colliery: I continue much pleased with Mr. Croudace's management and with our own prospects in connection with this very promising undertaking, than which I do not know anything in the shape of mining enterprise that contains less of the speculative element. There will doubtless be great competition in the coal trade in New South Wales, but the best situated collieries, producing a good article, can scarcely fail to do a profitable business, and the situation and quality of our coal place us in the very first rank in this respect. I may here mention that we have decided to bestow the appellation of the 'Lambton Colliery' upon this establishment. * * * The engine, I am glad to say, has been completed and dispatched to the colliery, and will be erected and set to work with all practicable speed. All this is, of course, most important in its bearing on the prospect of early returns to the shareholders. Since I last wrote I have been again to the colliery, and was pleased to find a considerable quantity of very fine coal at bank. I fixed a situation for the township of Lambton on our land adjoining the colliery. We had previously had several applications for allotments in the intended township. * * * Mr. Croudace is laying out the colliery with a view to an extensive and economical production of coal. Both in Adelaide and in Melbourne I have been in communication with the people most extensively engaged in the coal trade, and have reason to believe we shall effect a good footing both in South Australia and in Victoria. In both colonies the consumption of coal is largely on the increase."

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has shown more activity during the past week than for some time previously, and an average amount of business appears to have been transacted. Several improvements have been reported in different mines, which have had a tendency to create a demand, and, in many instances, at advanced prices. More steadiness has been observed, and, consequently, less fluctuations have resulted. Should the advances have taken place solely upon the merits of the discoveries it will give a steadier tone and greater permanency to the market generally.

WHEAL SETONS have been largely dealt in, and, notwithstanding the fluctuations during the early part of the week, the prices have considerably advanced, and left off firmer. ——WEST SETONS have also changed hands at present quotations.——TINCROFT, EAST BASSET, SOUTH TOLGUS, EAST CARN BREA, WEST TOLGUS, GREAT SOUTH TOLGUS, and a few others have been in good request, without any material change to notice.——GRAMBLER AND ST. AUBYN, CARGOLL, COOK'S KITCHEN, NORTH BASSET, and WEST FRANCES have been at slight advances.——Enquiries have been made, and fair amount of business transacted, in GRENVILLE, EAST GREENVILLE, UNION, CARN CAMBORNE, CLIFFORD, and UNY.——NORTH ROSKEARS have been extensively dealt in, and at improved rates.——NORTH CROFTY, NORTH TRESKERBY, and SOUTH CROFTY are firm at present quotations.——NORTH DOWNS, PENDEEN, and TOLVADDEN have not been quite so firm.——EAST ROSEWARNES are in good request, at improved rates, and, from the important improvements which have taken place, show a tendency for a considerable advance.——HARRIETTS have advanced, and continue in good request, at present prices. ——KITTY (St. Agnes) and ROSEWALL HILL AND RANSOM UNITED find buyers at market rates.——GREAT WHEAL FORTUNE, BASSET AND GRYLLS, TRUMPET UNITED, and WHEAL GRYLLS have been sought for, the former at advanced figures.——WHEAL MARGARET, PROVIDENCE MINES, and TREMAYNE are also enquired for.——EAST CARADONS have, as usual, shared freely and largely in the transactions of the week, with less fluctuations than ordinary, and left off firmer.——MARKE VALLEYS have improved, and in good demand.—LUDCOTTS are not so firm, although a large number of shares have changed hands. ——WEST CARADONS have improved very much upon last week's quotations.——HERODSFOOT, TRELAWNY, MARY ANN, WEST SHARP TOR, and GONAMENA have changed hands at present quotations.

HINGSTON DOWNS have been more in request, and several bargains effected.——CRENORS have been extensively dealt in, and continue to claim considerable attention, although large dealings have been followed by changes in price.——EAST RUSSELLS show a tendency to advance, and shares freely bought at minimum quotations.——NORTH MINERA, BRYN GWIOG, and LONG RAKE continue in request.——EAST CARADON: The 70 east, on caunter lode, has changed a little, being now worth from 30*l*. to 35*l*. per fm., and the same level west 40*l*.; the 60 east 20*l*.; the 50 east 70*l*.—New Lode: The 70 east is worth 80*l*. per fm.; the 70 west 30*l*. per fm.; the 60 east 25*l*. The winze sinking under the 60 continues worth 35*l*. per fm.

At WHEAL LUDCOTT quarterly meeting the financial statement showed a profit for the three months of 2517*l*. 4s. The credit balance is given at 3354*l*. 9s. 6d., from which a dividend of 2400*l*., 10s. per share, declared has to be deducted. The agent's report furnishes a favourable account of the lode in Willcock's shaft, and the several levels diverging therefrom, which are producing a fair amount of lead. The silver continues to hold in several important places, and the 96 fm. level holds out much promise of continuing to that point. There are many other interesting points to come off, to effect which the operations are being directed.

WHEAL IDA: A grant has been obtained for working a piece of ground in the parish of St. Ive, under the above name. The property is in a very highly mineralised district, being surrounded by some of the best mines in the locality of Caradon Hill. They are driving an adit to intersect the known lodes, and in doing so one or two highly promising ones have been discovered.

EAST TRESKERBY continues to progress very satisfactorily, holding out much promise, but without any material change since last noticed. The 40 end west has not yet emerged from the elvan, and the 40 east is looking very encouraging. In the 55 east they have some rich stones of lead.

At EAST ROSEWARNE two-monthly meeting the financial statement presented a very satisfactory position. The balance in hand amounts to 66*l*. 5s., after paying off a debit balance from last account of 247*l*.; and the agent's report of the mine affords a more gratifying and encouraging account, showing every probability of the mine progressing towards a dividend state. This mine has recently attracted the attention of most of the leading practical agents of the district, and several inspections have taken place even by those who were prejudiced against the mine, and are now surprised at the important changes which have been in course of gradual development. The prospects for a permanent and paying mine are considered of more than ordinary character, and the prevailing opinion among those best conversant with the opening of a young and wealthy mine is that it is safely progressing towards that position. The shaft is in a good course of ore, and the several levels are opening out rich ore ground, and the financial position is highly favourable, so that by the next meeting there is every reason to believe the above views will be amply verified.——GREAT RETALLACK is now down to the 60, and does not at present afford that encouragement which a short time since was anticipated. The winze in the bottom of the 35 is reported to be looking promising, without that richness of silver which at one time it possessed. The last parcel realised between 50*l*. and 60*l*. The next sampling will be two parcels of blende.——NORTH ROSKEAR is opening out remarkably well, especially in the deeper levels, where they have some extraordinary courses of ore. The sinking of Pierce's shaft is affording the means of developing immense deposits; and, should the ore prove of a permanent character, there is little doubt of this becoming a great returning mine.

ST. IVES WHEAL ALLEN continues to present every encouragement, and will, in all probability, increase their returns in a short time. The new Carbona lode is still worth 20*l*. per fm., and a new shaft is now about being sunk more fully to develope the same course of tin. The 20, east of Geisler's, is valued at 10*l*., the winze at 9*l*. per fm., and the 30 east about 14*l*. per fm., with other favourable prospects.

At MILL POOL MINE meeting the accounts for four months showed a loss on the workings of 320*l*. 9s. 7d. The gross amount against the adventurers is given at 1430*l*. 7s. 8d., and a call of 5s. per share was made. In consequence of the general poverty of the mine, and the cheerless prospects, a resolution was passed for convening a special meeting on Feb. 11, for the purpose of considering the propriety of continuing the operations or abandoning the mine.

TRUMPET UNITED is reported to have improved, and looking more encouraging, especially in the bottom of the shaft, which is producing some good stones of tin, with an apparent change of ground coming in. The several levels are yielding some fair work for tin.——TREWORLIS is also represented to have improved in the shaft, where a productive lode is now coming in.

ST. JUST UNITED: They are still clearing some of the old levels and shafts, laying open large quantities of good tin ground, which can be taken away at a low cost when the shafts are completely cleared for drawing. The new lode is reported to be in excellent tinny ground. From the Red Dipper shaft they are driving the 30 east in a course of tin, and purpose extending the level, to intersect the Wheal Owl and Bellow lodes, which have proved so productive in the neighbouring setts. There is no doubt that vast quantities of tin can be easily and cheaply returned when the mines are cleared to the old workings. (It is to be regretted that Capt. Carthew does not give the value of the respective places of operation, which has been a matter of complaint with several of the shareholders.)

VALE OF TOWY is reported to have improved in several important points, the ground becoming more mineralised, and presenting prospects more cheering than for some time past. The 50, 60, and 70 have improved, and are working to a profit. They have intersected the lode in the bottom, or 124, where a great improvement is expected as soon as it gets beyond the influence of the cross-course; and the call of 1s. made last week places the mine in a good financial position.

ROARING WATER: It is reported that further improvements have taken place in the Orchard lode, which has become larger and more mineralised; and its general character more strongly indicative of a rich and productive lode in depth. If the opinion formed through the medium of intelligence and practicable experience offers any recommendation, that given by Capt. H. Thomas is a sufficient guarantee, when he states that "as far as my judgment goes I have seldom seen a lode that holds out such prospects of speedy success." The operations, which have hitherto been of a limited nature, have fully confirmed the reports upon which the property was taken up and introduced to the public; and if the discoveries with such contracted means, and in the adit level only, offer such encouraging prospects, great and important results may be fairly anticipated when the company is in full work on the several well-known and flattering lodes. It is stated that the applications for shares have been more abundant than at first expected, and that the allotment will be justly and equitably made in the course of a few days. Soon after which the utmost activity will prevail, by the employment by a full complement of mining operatives in the development of this highly-mineralised property, with the anticipated result of perfect success. JAMES LANE.

From Mr. GEORGE BATTERS:—The market for mining shares has during the week been very active. A large amount of business has been transacted, and prices generally show an improvement. The rate of discount at the Bank of England has been raised to 4 per cent., and at the Bank of France to 5. The amount of bullion now held by the Bank of England is at the lowest point touched since Oct., 1861. The trade of the country during the past year has been good, there have been few failures, the accumulations of profit from trade have been large, and the prospects for the future are decidedly good. Possibly money may manifest a further hardening tendency, which, instead of being regarded as an unfavourable symptom, ought to be looked on as highly favourable for legitimate trade in all its branches. The markets of the Stock Exchange have not been influenced to any great extent, for the movements were looked on as inevitable. Consols, in the early part of the week, fell ⅜ per cent.; railways also manifested a drooping tendency. Since Thursday the markets generally were firm, especially for banks and miscellaneous shares. The market for metals is unaltered. The dealings in mining shares have been chiefly centred in NORTH ROSKEARS, EAST CARADON, WHEAL SETON, NORTH CROFTY, WHEAL UNION, SOUTH CARADON, DEVON GREAT CONSOLS, GREAT SOUTH TOLGUS, WEST TOLGUS, EAST CARN BREA, &c. NORTH ROSKEARS have been largely dealt in, closing finally at 65 to 66. At the meeting held in Cornwall, on Tuesday last, the accounts presented and the report read were of a more favourable character than any for years past. The 184 end, west of Pearce's shaft, is worth 50*l*. per fm.; the stopes in the back of the 184, 50*l*. per fm.; winze sinking below the 184, 75*l*. per fm.; winze below the 174, 75*l*. per fm. Both the tin and copper departments are looking better, and are now worked round to a state of profit: within four months from now dividends may be expected. At the meeting it was determined to work the extreme western ground as a new company, and to secure another sett which has been offered to the manager, embracing the Wheal Seton lode for a great extent, which bids fair to be of importance. The subject for confirmation at the next meeting is the distribution *pro rata* of the shares in the new company to the present shareholders in North Roskear for nothing, and which cannot fail to command a high figure. The Camborne district is, beyond doubt, the most important and lasting in Cornwall. North Roskear, North Crofty, East Pool, South Crofty, Wheal Seton, West Seton, New Seton, Tincroft, Cook's Kitchen, Dolcoath, &c., are destined to be mines for ages. If any mines can be treated as investments, these are the mines. North Roskear, from its situation, actual discoveries, extent of ground, &c., must be pronounced one of the very cheapest mines in Cornwall. In last week's Journal, under an anonymous heading, the accounts were impugned, and it was broadly stated that a loss had been made, during the last two months, of 700*l*., whereas, in fact, a profit has been realised of 300*l*., and the mine placed in a position of progression for dividends of the first order. The immense outlay and patience required to bring a mine round to profits from tin in a second stage of working after copper in this district has been passed through, and the future is plain sailing. NORTH CROFTYS, 5 to 5¼. This mine will soon follow suit. The 120 and 130 fm. levels, east of the slide, have improved for tin. The 170 is worth for copper and tin 20*l*. per fm.; the 160 has now nearly reached the shoot of tin gone down in the bottom of the 150. WHEAL UNIONS, 6 to 6⅛. The flat-rod shaft is down to the 76. Levels east and west will now be driven in a most promising lode. EAST CARN BREAS have been steady at 11¼ to 11¾. The middle lode in the 60 fm. level west is worth 3 tons per fm.; the 50 west 1 ton; the winze sinking below the 50, 1 ton; the 50 west, on south lode, 1 ton. In about a fortnight's time it may be expected that the new lode will be cut in the 60 cross-cut: the indications are favourable. GREAT SOUTH TOLGUS, 6¼ to 6⅛. The lode in the shaft is valued at 80*l*. per fm. Shares have been more offered for sale. WHEAL HARRIETTS are attracting attention at 4¼ to 4⅛. EAST ROSEWARNES at 3 to 3¼. WORVAS DOWNS at 7 to 7½. SITHNEY CARNMEALS at 3 to 3¼. WHEAL SETONS have risen to 260, 265. The mine is opening up a great success. EAST CARADONS have risen to 47, 47½. The lode in the 50 west has improved to 70*l*. per fm.; the 60 east is valued at 20*l*. per fm., the 70*l*. east 40*l*., and west 30*l*. A considerable business has been done in the shares. SOUTH CROFTYS, 27, 28. This mine is working on the East Pool lode. WEST TOLGUS are in demand at 61½ to 62½. SOUTH CARADONS at 390 to 400, DEVON GREAT CONSOLS, at 500 to 510. In tin mines Providence, Tincroft, Cook's Kitchen, Wheal Grylls, and Basset and Grylls find ready buyers. In lead mines Bryn Gwoig, 31, 32; Long Rake, 16 to 16½; Billins, 16, 17; Herodsfoot, 49, 50, are deserving of attention. The market closes at the best point of the week. NORTH ROSKEAR and WHEAL SETON are in great demand.

SUCCESSFUL RESULTS OF LEGITIMATE MINING.

We have already referred to the useful little volume published by Messrs. WEBB and GEACH, entitled the "History and Progress of Mining in the Caradon and Liskeard District," and now purpose, as the district is one to which much interest attaches, to endeavour to give an idea of the contents of the book. The nine mines in the district at present paying dividends have returned to the shareholders 500,233*l*., of which 364,790*l*. is due to copper, and 135,443*l*. to silver-lead mines. The total cost of these mines, in the shape of calls, has only been 71,666*l*. for the copper, and 25,447*l*. for the silver and lead mines, and the present total selling price of the copper mines is 625,334*l*. and 128,576*l*. for the lead. It has hitherto been the custom of contributors to mining literature to let the matter rest here, and hence a large proportion of the public have contracted the notion that the prizes are so few and far between that, although large profits *may* result in isolated instances, there are far greater probabilities of failure. Messrs. Webb and Geach have taken a step which must effectually dispel such an erroneous opinion; they include both profitable and unprofitable mines, and thus prove what has but too often been denied—that, supposing the Caradon and Liskeard district to be, as it is, a fair representative of the entire county, *nearly 50 per cent. more is received from Cornwall in the shape of profits than is sent into it in the shape of capital.*

That it may not be supposed that so satisfactory a statement is simply an ungrounded assertion, we give the precise figures, and may observe that Messrs. Webb and Geach have included even mines upon which large sums have been expended, and not an ounce of ore returned, owing to the productive lodes not having yet been cut into. It is shown that there has been expended upon mines which have already reached the dividend state 97,113*l*., and upon those which have not yet proved profitable 243,474*l*.—making a total of 340,587*l*. In return for this outlay, 500,233*l*. has been received in dividends, which is 47 per cent. more than the outlay. But it must not be supposed that even this enormous percentage represents the entire profits derived by the adventurers, for it will be apparent that not only have they the dividends actually received to reimburse them for their outlay, but they have a marketable commodity in the shares which they hold. The statement of receipt and expenditure, will, consequently, stand:—

RECEIPTS.

Dividends declared		£500,233
Market value of shares:—		
Dividend mines	753,910	
Progressive mines	196,025	= £1,450,168

EXPENDITURE.

Total outlay, as above	£ 340,587
Leaving profit	£1,109,581

Now, it is scarcely fifty years ago that mining commenced in the district, and many of the mines have only been opened within the past few years, so that if thirty years be taken as the average time during which the mines have been at work, it must be admitted that the estimate will certainly not be over sanguine. Upon these data the annual profit will, of course, be one-thirtieth of the balance of profit shown in the above statement, which we find to be 36,966*l*.; and an annual return of 36,966*l*., upon an outlay of 340,587*l*., is equal to more than 10*l*. 17s. per cent. per annum. The profit actually derived by individuals will, of course, vary according to the amount of judgment displayed in the selection of mines in which to invest, and hence the frequent statement that 15 per cent. per annum may be realised by embarking in mining enterprise cannot be considered extraordinary. The best course that the capitalist can adopt is to consult a broker of position and integrity, and one who is not too deeply interested in any particular mine, and to be content to realise his profits when they equal (say) 20 per cent., abandoning all hope of becoming rich by a single speculation, and maintaining confidence in the facts above demonstrated that, taking profitable and unprofitable mines together, about 3*l*. 10s. is returned for every 1*l*. invested. Let this fact be remembered, and there will be no want amongst capitalists of confidence in mining enterprise, and fewer attempts will be made to attribute ruin, arising from other causes, to embarking in this branch of our national industry.

LIGHTING MINES AND DRAWING COALS BY ELECTRICITY.—An invention which, if practically developed, would admit of the economical use of electricity for underground traction, and of the utilisation of the waste electricity for lighting the mine, has recently been patented by Messrs. Morris and Weare, of Birmingham. They propose to employ electricity of tension obtained from magneto-electric machines, with an induction by which they obtain intensity of electricity with small battery power, and stop the action of such machines when necessary by the application of a break. They also pass electricity generated by hydro-electric machines through insulated vessels containing filings or oxides of metals, in order to vary the current and apply it to different purposes. They propose to pass currents of electricity, however obtained, and subsequently induced or condensed, through one or more vacuum tubes or vessels of glass, placed in succession, variously shaped, and variously coloured or not at discretion, so as to give colours to the light; thus, for example, instead of tubes, two sheets of glass may be hermetically sealed round the edges, or two globes may be placed one within the other. These tubes, vessels, or globes may be prepared as follows:—The air is first to be exhausted from them by any suitable method, and a gas is then to be injected, of which the following are a few examples:—carbonic acid gas, carburetted hydrogen gas, phosphuretted hydrogen gas, nitrogen, hydrogen, oxygen, and other similar gases, or the vapour from an ether, such as the sulphuric, nitric, hydrochloric, and other similar ethers; this gas or ether is again to be exhausted from the tube till a sufficient vacuum is obtained to permit the electricity to flow freely from the points of platinum or other wires placed in connection with a magneto-electric machine or induction coil, and cause illumination. The tube is then to be hermetically sealed, and so continues constant in its action. Should it be desirable in the above tubes the gases may be combined, or the ethers may be combined, or the gases may be combined with the ethers. They also employ in some cases the above tubes so exhausted or prepared, in connection with the wires conveying the electricity from Leyden jars, or an arrangement similar to them, charged by means of induction coils and batteries, by which means the illuminating power is much increased; and they also use the electricity similarly conveyed through induction coils into and from Leyden jars, or other similar arrangements as a substitute for them, without having recourse to any glass or other vessel whatever, by simply bringing the conductors from each terminal to within a short distance of each other, which alone is sufficient to produce a brilliant light of great illuminating power, applicable to lighting houses and other places where a brilliant light is required. They further propose to attach electro-magnetic machines, or vulcanite, or other rubbers, to the wheels or other parts of railway or other carriages, as one method of generating electricity to be applied to the production of light. They also use reflectors of various constructions in connection with their light, and also apply foils or deposits of silver on the back of the vacuum glasses, in lieu of having separate reflectors. These glasses may also be dished, and the outside sufficiently covered with oil as to form a parabolic or other reflector in the glass itself. They also use their light in conjunction with lenses and glass of various colours and shapes in order to produce light suitable for various purposes, and also use ground glass and other suitable media over their vacuum vessels, in order to subdue the light; and they further use a metallic, or other cover, of a suitable shape and contrivance to place or draw over the light, in order to shut it off as required. To obtain heat they use electricity evolved from powerful batteries and induction coils, by introducing spirals of flattened platinum wire or sheets, rolled up into spiral or other coils in such a manner as to give the greatest possible heating surface to them. These flattened wires or sheets may be made of either platinum or other suitable metal. The coils so prepared are to be inserted into the liquor, or other substances, to be heated, and the ends of these coils then joined to the poles of the battery. For jewellery and other purposes they propose to fuse together by electricity the joints or ends of various metals, and also to fuse those solders where it is necessary to use them whether soft or hard.

EAST TRELEATH AND SOUTH WHEAL LEISURE.—The hearing of the case of the bankruptcy of Paul Rabey, jun., before Mr. Commissioner Andrews, at the Exeter District Court, led to disclosures of the means in which some cost-book companies are got up, but we entirely dissent from the statement of the bankrupt's advocate, that the same system is adopted in all cases, as having no foundation in fact.

TYWARNHAILE MINE.

In 6000 shares. On the "COST-BOOK SYSTEM."

£30,000 of capital has been expended in plant and bringing the mine into working order, making £5 per share, and all the shares are alike subject to calls.

Any shareholder can at any time determine his own liability by relinquishing his interest.

COMMITTEE OF MANAGEMENT.

The Right Hon. the EARL OF SHREWSBURY AND TALBOT.
Lieut.-General C. MURRAY HAY, 4, Lower Belgrave-street.
C. SEALE HAYNE, Esq., Fuge House, Devon, and 41, Victoria-street, Westminster (Chairman of the Dartmouth and Torbay Railway Company).
J. H. MACKENZIE, Esq. (Deputy-Chairman of the London and Lancashire Life Assurance Company).
CHARLES P. FROOM, Esq., 4, Cambridge-square, Hyde Park (Director of the Shropshire Mineral Railway Company).

BANKERS.

The Alliance Bank of London and Liverpool (Limited), Lothbury, London, and Albany, Liverpool.

BROKERS.

London ..... Messrs. Froom Brothers, 20, Change-alley, Cornhill, E.C.
Liverpool .... Messrs. Tinley and Son.

LONDON MANAGER.

J. H. Murchison, Esq., 117, Bishopsgate-street Within.

OFFICES,—117, BISHOPSGATE STREET WITHIN, LONDON.

The Tywarnhaile Mine is situate in the parish of St. Agnes, near Redruth, one of the most productive and profitable mineral districts in the county of Cornwall.

In the year ending June, 1851, there were sold from the mine 6423 tons of copper ore, and in the nine months ending March, 1852, the quantity sold was 4035 tons.

The mine was then stopped, owing to the depressed standard of copper at that time, and the consequent low prices received for the ores.

The present proprietors have lately expended a large sum in draining the mine, and in bringing it into working order, the machinery and plant alone having cost £13,000.

During the time that they have been clearing up the old works, and have been laying out a large dead expenditure of a permanent character, they have sold about £20,000 worth of copper ore, the quality of which considerably improves in the deeper levels.

The bottom of the mine (100 fms.) has only recently been reached; but the returns are already nearly 300 tons of ore per month, and it will be seen from the annexed report of the managing agent that an additional 100 tons per month of the best quality will, without difficulty, be shortly obtained, and there is little doubt but that even these returns will be gradually increased.

The mine is held under lease from the Duchy of Cornwall, at the very low rate of 1-24th royalty.

The capital required being larger than was originally contemplated the present proprietors have resolved to constitute the company on the Cost-book System, in 6000 shares, and to offer a limited number of these to new parties.

The 6000 shares will be credited with £5 per share, being at the rate of the past cash expenditure from capital alone (excluding the proceeds of the ore re-spent), and of these shares 2000 are retained by the present proprietors, who also subscribe for 2000 more at £5 per share, leaving only 2000 for disposal at that price, and a portion of these are already applied for. For the convenience of purchasers a deposit of £1 per share will be received, and the remaining £4 in equal quarterly instalments; but if paid within one month of the payment of the deposit, discounts of 2½, 5, 7½, and 10 per cent. respectively on the instalments will be allowed. The sale of these shares will clear the mine of every liability, and give a good balance for working. Should further calls be required, the whole of the shares will bear the same alike.

It will be seen that by this arrangement no premium or profit is asked, and that new parties come into an undertaking apparently on the eve of realising handsome profits, having saved the long and tedious delay necessary to the completion of extensive surface works and heavy underground operations.

The mine being well found in powerful and substantial machinery, the capital required for future expenditure will be almost entirely applied to opening up and developing the lodes already yielding so largely, and any others that may be discovered.

The following figures show the large profits realised by copper mining, when at all successful, and the great productiveness of the lode at Tywarnhaile encourages the probability of at least equal results at that mine:—

Name of Mine.	Amount paid per share.	Present price per share.	Dividends paid per share.
Carn Brea	£15 0 0	£ 65 0 0	£273 10 0
Devon Great Consols ..	1 0 0	500 0 0	826 0 0
East Caradon	2 15 0	45 0 0	5 17 6
East Basset	29 10 0	50 0 0	105 0 0
South Caradon.....	1 5 0	400 0 0	390 0 0
South Wheal Frances..	19 0 0	97 10 0	364 0 0
West Basset	1 10 0	13 0 0	23 0 0
West Caradon	5 0 0	31 0 0	101 0 0
West Seton	47 10 0	290 0 0	363 0 0
Wheal Basset	5 2 6	85 0 0	590 0 0
Wheal Buller	5 0 0	55 0 0	929 0 0

Applications for the shares undisposed of, may be made in the accompanying form, to the London manager at the office, 117, Bishopsgate-street-within, E.C., or to the brokers, from all of whom prospectuses with report can be obtained.

London, Jan., 1863.

FORM OF APPLICATION FOR SHARES.

To the Committee of Management of the Tywarnhaile Mine,
In 6000 shares, on the "Cost-book System."

I beg to inform you that I will take and accept shares in the proposed company for working the above mine, to be established on the "Cost-book System," or any less number that may be allotted me, on the terms and subject to the conditions named in your prospectus of January, 1863, and I undertake and agree to pay the deposit of £1 per share on such shares, being £ , into the Alliance Bank, Lothbury, London, or the Albany, Liverpool, to the credit of the company, within 14 days after notice of the allotment by the committee of management has been sent to me by post.*

Name .....
Address .....
Profession .....

* If the other instalments are to be paid in advance, deducting the discounts, please add this intention.

THE RAMSAY LEAD MINING AND SMELTING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, and to be empowered under Special Act of the Canadian Legislature.

Capital £100,000, in 20,000 shares of £5 each.

Deposit on application 5s. per share, and a further payment of 5s. per share on allotment.

Calls not to exceed 10s. per share, nor to be made at intervals of less than two months.

It is not expected that more than £2 per share will be required.

DIRECTORS.

HENRY HAYMEN, Esq., Chairman of the Nerbudda Coal and Iron Co.—CHAIRMAN.
GEORGE FREDERICK ANDERSON, Esq., 34, Nottingham-place, Regent's-park.
JAMES A. FOOT, Esq., 10, King's Bench-walk, Temple.
RALPH LEESON, Esq., Gwydir House, Cambridge.
Major-General DOWNING, 36, Gloucester-terrace, Hyde-park.
JAMES KIRK, Esq., 16, Great Queen-street, Lincoln's Inn.
JOHN WILLIAMS, Esq., 47, Mark-lane.

BANKERS—The Metropolitan and Provincial Bank (Limited).
SOLICITORS—Messrs. Howard, Doliman, and Lowther, 141, Fenchurch-street.
BROKERS—Messrs. Griffith and Druett, 23, Tokenhouse-yard.
AUDITOR—G. A. Hilliler, Esq., Secretary San Paulo Brazilian Railway, 111, Gresham House.
SECRETARY (pro tem.)—Mr. F. Henderson Grieve.

TEMPORARY OFFICES,—17, ABCHURCH LANE, E.C.

The object of this company is to purchase and work the Ramsay Lead Mine, Canada West, and generally to acquire and work such mineral rights and properties in Canada, as the Ramsay Lead Mining and Smelting Company is authorised by the Special Acts of the Colonial Legislature, 22 Vic., c. 112, and 25 Vic., c. 76.

The Ramsay Lead Mine is situated in the township of Ramsay, county of Lanark, C.W., within three-quarters of a mile of the Brockville and Ottawa Railroad, and about 4 miles by rail from the Rideau Canal, connecting the St. Lawrence and Ottawa Rivers.

The geological character of the district and a full description of the lode are given in the extract from Sir William Logan's report to the Canadian Legislature, founded upon an elaborate survey by that eminent geologist of the Ramsay Lead Mine, and the district in which it is situated; and in the report of Captain Plummer, manager for the Messrs. John Taylor and Sons, of London, at the Wellington and Copper Bay Mines, on Lake Huron, both of which may be seen at the offices of the company.

The Ramsay Lead Mining and Smelting Company has been incorporated by the Provincial Legislature with large privileges; it possesses power to carry on mining of all ores and minerals, not only at Ramsay, but throughout Canada; and to deal in and manufacture all metals, ores, and their products.

It is intended to purchase the rights of the Ramsay Lead Mining and Smelting Company, in accordance with the terms of the original Act of the Colonial Legislature, 22 Vic., c. 112, and the amended Act 25 Vic., c. 75; and a Special Act of the Canadian Legislature will be procured, at the expense of the vendors, to vest in this company all the privileges secured to the Ramsay Lead Mining and Smelting Company by those Acts.

As the produce of the mine increases, it may be the interest of the company to manufacture bar and sheet lead and shot, none of which are now made in Canada, the processes connected with which are simple, and the profit afforded by them large, irrespective of the duty of 20 per cent. to which they are subject when imported from abroad.

A contract has been entered into for the purchase of all the rights of the Ramsay Lead Mining and Smelting Company for £25,000, payable in shares or cash, at the option of the directors, and the vendors have undertaken to bear all expenses in connection with the formation and establishment of the company up to allotment, and, consequently, the company will be relieved from any charges under the head of preliminary expenses or promotion money.

A first-class prize medal has been awarded by the Commissioners of the International Exhibition for the specimens of ore and lead sent from the mines. The specimens were exhibited in the Canadian department of the Exhibition, and may be seen at the offices of the company.

Applications for shares may be addressed to the brokers, or secretary of the company. Detailed prospectuses can be obtained at the offices of the company.

BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES.

MESSRS. T. FULLER AND CO., 26, CHANGE ALLEY, CORNHILL, LONDON, TRANSACT BUSINESS in EVERY DESCRIPTION of SHARES in BANKS, RAILWAYS, CANALS, INSURANCE, MINES, and GOVERNMENT STOCK. Dividends received, calls paid, and every class of Stock Exchange business effected.

There being a considerable amount of money locked up in shares not prominently before the public, and consequently difficult of sale, Messrs. T. FULLER and Co. invite the holders of such stock to communicate with them, having channels for the disposal of every description of shares.

FOR SPECIAL SALE:—Shares in an established company (limited), the property freehold; and in several mines which pay regular dividends of 12½ to 20 per cent.

Messrs. FULLER and Co. having had upwards of 20 years' experience in the mining market, prompt them to point out shares in certain progressive mines as prizes for the year 1863. Telegraphic messages promptly attended to.

Commission, 1¼ per cent.

Bankers: Metropolitan and Provincial.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the BUDNICK CONSOLS MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 26th day of January inst., to SEND in their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS on the said company, to William Michell, Esq., the Registrar of the said Court at Truro.

Dated Registrar's Office, Truro, January 10, 1863.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL SICILY MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 26th day of January inst., to SEND in their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS on the said company, to William Michell, Esq., the Registrar of the said Court.

Dated Registrar's Office, Truro, January 10, 1863.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL SICILY MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 3d day of February next, at Eleven o'clock in the forenoon, at WHEAL SICILY MINE, in the parish of Broodoak, within the said Stannaries, either together or in lots, the MINE SETT or GRANT of the said company, and the MINING MACHINERY and MATERIALS belonging to the said company. The mine is held under a sett or grant, for a term of 21 years, from the 25th March, 1860.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.

Dated Registrar's Office, Truro, January 14, 1863.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL NELSON MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 28th day of January inst., to SEND in their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS on the said company, to William Michell, Esq., the Registrar of the said Court, at his office, Truro.

Dated this 15th day of January, 1863.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the HUCKWORTHY BRIDGE CONSOLS MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 29th day of December, 1862, presented to the Vice-Warden of the Stannaries, by William Morgan Whittell, a contributory of the said company, and that the said petition is directed to be heard before the Vice-Warden, at Chubb's Hotel, Plymouth, on Tuesday, the 10th day of February next, at Eleven o'clock in the forenoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his solicitor, or agent, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., the secretary of the Vice-Warden, Truro, Cornwall. Every such contributory or creditor is entitled to a copy of the petition, and affidavit verifying the same, from the petitioner or his solicitor, within twenty-four hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing in opposition to the petition must be filed at the Registrar's office, Truro, on or before Saturday, the 7th day of February next, and notice thereof must at the same time be given to the petitioner, his solicitor, or agents.

CHRISTR. V. BRIDGMAN, of Tavistock (Solicitor of the Petitioner).
H. S. STOKES, Truro (Agent of the said Solicitor).

Dated this 10th day of January, 1863.

TUESDAY, JANUARY 20, 1863.
EAST TREFUSIS MINE, REDRUTH, CORNWALL.

MR. JOHN BURGESS (Auctioneer, &c., Barncoose), is instructed to SELL BY PUBLIC AUCTION, on Tuesday, January 20, 1863, at Eleven o'clock in the forenoon, at EAST TREFUSIS MINE, in the parish of REDRUTH, the whole of the EXCELLENT MINE MATERIALS, viz.:—

A 28 in. CYLINDER PUMPING-ENGINE, with 8 ton BOILER, all in good condition;
2 balance bobs, one with new oak beam, best iron straps and brasses.
1 8 arm capstan and shears, and capstan chain, ⅝ to ⅞.
2 horse whims and shaft tackles.
300 fms. whim chain.
300 fms. ½ in. to 7-16ths chain.
37 9 ft. 9 in. pumps.
33 9 ft. 6 in. ditto.
14 9 ft. 5 in. ditto.
2 8 in. sinking windbores.
3 6 ft. 9 in. flat bottom windbores.
4 windbores, 4½, 5, and 5½ in.
3 12 ft. 8 in. working barrels, good.
3 6 ft. 8 in. door pieces.
2 6 ft. 5 in. door pieces.
3 10 ft. working barrels, 8, 5½, 4½ in.
3 H and X top door pieces.
3 plunger cases.
4 plunger poles.
3 stuffing boxes and glands.
10 bucket prongs.
76 fms. best iron bucket rods, 1, 1¼ in.
85 fms. 7 in. wood rods, with strapping plates, complete.
23 fms. 6 in. ditto.
80 fms. 1¾ in. flat rods, pullies, & stands.
180 fms. iron stave ladders.
180 fms. of wood and zinc air pipes.

SHOP.—Double power crab winch, jack, and two sets of double and treble sheave blocks; 1 36 in. smith's bellows, old and new iron, borer steel, screw stocks, vice, and boring machine, smiths' and miners' tools, carpenters' bench, grindstone, &c.

A large quantity of new and old timber, good plank, whole timber, half and quarter timber, in lots.

For any further information, apply to Capt. HOSKING, agent, on the Mine; or the auctioneer, Barncoose, Redruth. Sale to commence at 11 A.M. precisely.

Dated January 7, 1863.

TO ENGINEERS, MINING AGENTS, AND OTHERS.

IN THE MATTER OF THE RIBDEN MINING COMPANY (LIMITED).

MR. JAMES CARTER WILL PEREMPTORILY SELL, BY AUCTION (by order of the liquidators of the said company), on Thursday, the 22d day of January, 1863, in one or more lot or lots, and subject to such conditions as will be declared at the time of sale,

All that the UNEXPIRED TERM of 21 years, from 25th March, 1855, of and in the LEASE of the RIBDEN SETT, dated the 1st day of September, 1855, and granted by the late Right Honourable Bertram Arthur Earl of Shrewsbury, to Messrs. Richmond and Niness.

Also, the whole of the VALUABLE WORKING PLANT of the RIBDEN COPPER MINE, near to Alton Towers and Oakamoor, in the county of Stafford, and consisting in part of a CORNISH PUMPING ENGINE, 10 ft. stroke, with 50 in. cylinder, and a 10 ton BOILER, and every other requisite, now in capital working order.

Also, another excellent 25 horse power STEAM ENGINE, with 18 inch cylinder, BOILER, wrought-iron chimney and fixings complete, and in good condition, now used as a rotary winding engine.

About 100 fms. of pumping apparatus and pitwork, of the best construction; 2 valuable 12 in. capstan ropes (one quite new), powerful capstan, horse whimsey and other machinery, the contents of a smith's shop, a large quantity of timber, wrought-iron, cast-iron, office desk, and miscellaneous effects, as per catalogues, which will be ready ten days prior to the day of sale, and may be had at the offices of the auctioneer, High-street-place, Nottingham; or of Captain R. Niness, Warslow Cottage, Ashbourne; the White Hart Hotel, Uttoxeter; and the Wheatsheaf Inn, Cheadle.

The sale will commence punctually at Twelve o'clock, at the mine, which is situate about three miles from the Alton and Oakamoor stations of the North Staffordshire Railway, and the engines, pumping plant, &c., will be sold at Two o'clock precisely.

TO MINE CAPITALISTS—VALUABLE OPPORTUNITY.

MESSRS. OLVER AND SONS are favoured with instructions to SELL BY AUCTION, on Thursday, the 12th day of February next, at noon, at the counting-house, on the mine, the whole of that well-known and VALUABLE MINE, known as WHEAL LOVELL, situate in the parish of WENDRON, in the county of CORNWALL.

The mine will be offered in one lot, including the whole of the ENGINES, PLANT, MACHINERY, and MATERIALS, as the same are now at work, including—

A 50 in. cylinder PUMPING ENGINE, with the THREE BOILERS.

A 24 in. STAMPING ENGINE, for 24 heads.

14½ in. steam whim, 200 fms. of pitwork of various sizes. Also, the whole of the tin leavings and slimes.

Lithograph plans of the mine are in preparation, and will be ready in a few days, which may be had, together with printed reports of the present condition and prospects of the mine recently made by competent inspectors, from which it will be seen this auction offers a valuable opportunity to mine adventurers of making more than ordinary return for their capital.

Application for plans and reports to be made to Capt. PHILLIPS, Wheal Lovell Mine, Falmouth; to the Auctioneers, Green Bank, Falmouth; or to Messrs. CARLYON and PAULL, solicitors, Truro.—Dated December 29, 1862.

GREAT WHEAL ALFRED, HAYLE, CORNWALL.

MR. BURGESS, Auctioneer, Barncoose, Redruth, WILL SELL, BY PRIVATE CONTRACT, at GREAT WHEAL ALFRED, HAYLE, CORNWALL,

ONE 65 in. cylinder PUMPING ENGINE; ONE BOILER and fittings, about 12 tons; first piece of main rod caps and brass.

ONE 25 in. cylinder ENGINE for WINDING and CRUSHING; ONE CRUSHER in excellent order.

ONE 47 in. cylinder ENGINE and BOILER. PUNCHING MACHINE, BORING MACHINE, and SCREWING MACHINE.

2 capstans, 2 capstan ropes, 20 and 21 in. pumps, H pieces, doorpieces, matchings, tram wagons, skips, kibbies, new shaft gig, &c.; mandril, lot of double faggotted iron, with many other things.

For any further information, apply to DAVID COHEN, Esq., 5, Bank' Chambers, Lothbury, London; or to JAMES HOLLOW, Esq., Lelant, Hayle, and 1, Crown-court, Broad-street, London.

TO BE DISPOSED OF, a most VALUABLE and IMPORTANT

LEASE of IRONSTONE in the best part of the CLEVELAND DISTRICT. There are three measures, of a total thickness of 24 feet. The railway runs close to the works, and direct into port; the transit thence is direct to London, and all European ports. Pig-iron of an excellent quality can be made here at about £2 per ton. This property presents a rare opportunity for the immediate formation of a first-class iron company.—Apply to "X. Y. Z.," *Staffordshire Advertiser* office, Wolverhampton.

COMPRESSED FUEL WORKS (Ashcroft's Patent), ABERDARE, GLAMORGANSHIRE, with the PLANT and MACHINERY and LETTERS PATENT; also, a LEASEHOLD COTTAGE and WORKSHOP at CARDIFF.

MESSRS. FULLER AND HORSEY are instructed to SELL BY AUCTION, on Tuesday, January 20, 1863, at Twelve o'clock, at the Auction Mart, London, in Two Lots, the FUEL WORKS, together with the PLANT and MACHINERY and Letters Patent, belonging to the ABERDARE PATENT FUEL COMPANY (LIMITED), at Aberdare, about half a mile from the Treaman station of the Aberdare Railway.

The land upon which the works are erected occupies a site of about three acres, and is held from the Marquis of Bute, for a term of 60 years, at a ground rent of £50 per annum. It has a considerable frontage next the Aberdare and Glamorganshire Canal, and two lines of railway (broad and narrow gauge) run within a few yards of the property. The works were constructed in 1859, and comprise the FUEL FACTORY, fitted (under Ashcroft's patent for improvements in working hydraulic presses, by which a much accelerated speed is obtained, and power saved), with a very powerful double cylinder HYDRAULIC FUEL PRESS, capable of compressing 100 tons of fuel daily; twelve FUEL MIXING MACHINES, with furnaces, pair of crushing rolls for pitch, and all requisite apparatus, worked by THREE HORIZONTAL STEAM-ENGINES, with TWO STEAM-BOILERS; a range of brick-built shops, for engineers, carpenters, and smiths, fitted with valuable and modern tools, including LATHES, PLANING and DRILLING MACHINES, worked by a separate STEAM-ENGINE, benches, forges, &c.; an office; coal receiving shed, with screens; wharf, with stone quay wall, about 120 ft. long, yards intersected with iron tramways, and manager's house, with garden and ground. Coals may be procured from adjoining collieries at 1s. per ton. With this lot will be included the Letters Patent for Great Britain and Ireland, dated April 15, 1859, for "Improvements in working presses and other hydraulic machines."

LOT 2 will comprise the LEASEHOLD INTEREST in a brick-built WORKSHOP, fitted with BOILER and STEAM-ENGINE; also, a COTTAGE and LAND, situate at MAINDY BANK, about one mile from Cardiff, and on the banks of the Glamorganshire Canal. The workshop, cottage, and land are held for the remainder of a term of 21 years, at a rent amounting to £24 6s. per annum.

To be viewed till the sale. Particulars may be had at the Angel Hotel, Cardiff; the Westgate Hotel, Newport; of Messrs. COURTENAY and CROOME, solicitors, 9, Gracechurch-street, London, E.C.; at the Mart; and of Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

SWALWELL IRONWORKS, NEWCASTLE-ON-TYNE, for more than 150 years in the possession of the firm of Crowley, Millington, and Co., and their predecessors, having a high reputation for the excellence of their manufactures.

MESSRS. FULLER AND HORSEY are instructed to SELL, BY AUCTION, on Wednesday, February 11, 1863, at Eleven for Twelve o'clock, on the premises, in One Lot, the LEASEHOLD INTEREST in and the FIXED PLANT and MACHINERY of the SWALWELL IRONWORKS.

These extensive works, for the manufacture of steel and steel goods, chain, ironmongery, and hardwares, are situate in the village of Swalwell, about four miles from Newcastle, through Elswick, and are supplied with water-power from a wier or dam of great extent, fed from the River Derwent, which flows through the works, and which is navigable for keels of small tonnage.

The Derwent Valley Railway, now in course of construction, will pass within a few yards of the works, and will give direct railway communication to the port of Newcastle, and to all parts of the kingdom. Coals can be obtained at 12s. per chaldron of 52 cwts.

The buildings, to which about 5 acres of ground have been appropriated, and upon which a considerable outlay has been recently made, comprise a spacious stone structure intended for a steam rolling mill. One steam-engine is fixed, and the foundations laid for a second steam-engine, and for two trains of rolls.

Adjoining the mill is the quay, with stone wharf wall and crane; numerous workshops for chain makers, file, hinge, ladle, hardware, and hammer makers, with fires and tools; chain testing house, with testing machine; IRON FOUNDRY, with cranes and cupola; STEAM ENGINE, two STEAM BOILERS and fan blast; smiths' shops, lofty and spacious turnery, with tools; STEEL FORGE, with hammers and fires; two large STEEL CONVERTING FURNACES, capable of making about 500 tons of steel annually; cast-steel house, with six pot furnaces; STEEL FORGE, with a new Morrison's patent STEAM HAMMER; with TWO BOILERS, COKE OVENS, two IRON FORGES, with bailing furnaces, cranes, hammers, and shears; and numerous other buildings, stabling, &c.

Also, TWENTY-EIGHT DWELLING-HOUSES for workmen, with garden plots, and a depôt for ashes and waste, 1 acre 1 rood 8 perches. The rentals derived from the workmen's houses are £120 per annum.

The whole of the works are held on lease for a term of 21 years, from March 25, 1858, at a rental of £320 per annum, and subject to covenants exceedingly favourable to the lessees.

To be viewed till the sale. Particulars may be had fourteen days prior to the sale, on the premises, and at the Station Hotel, Newcastle; at the "Midland Counties Herald" office, Birmingham; of Messrs. Vandercom, Cree, and Law, solicitors, Bush-lane, London, E.C.; of Messrs. CHARLES BROWN and DUBOIS, accountants, 10, Basinghall-street, London, E.C.; and of Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

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NOW IN FULL OPERATION, IN WALES.—TO BE DISPOSED OF, an OLD ESTABLISHED BUSINESS, with PREMISES and PLANT, adapted for SMELTING LEAD and ZINC ORES, and for the MANUFACTURE of SHEET LEAD and LEAD PIPE to the extent of about 85 tons per week; also for DESILVERISING LEAD ORES.

The works are most desirably placed on a line of railway, and with water communication. About £15,000 to £20,000 will be required. One-half the purchase money may remain on mortgage.

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There is an excellent FITTING-UP SHOP, 126 ft. long by 40 ft. wide, with a 50 horse power ENGINE, powerful lathes, screw-cutting machines, powerful machine for shaping boiler plates cold, cold roll turning lathes, and a great variety of valuable and costly tools.

There is also a very extensive and well arraanged SMITHS' SHOP, 94 ft. by 38 ft., with RIVET MAKING and OTHER MACHINES, complete, and in good working order.

The premises are admirably adapted for engine building or boiler making, having ample room, and machines and tools in every way suitable for such work.

The site is considered by the ablest practical men to be one of the best in the kingdom for iron shipbuilding, every necessary convenience being already provided, so that a keel may be laid at once. The tides in the River Usk rise 30 ft., so that vessels of the largest class can be launched at ease. The ironworks in the neighbourhood are renowned for the excellent quality of their ship and boiler plates, and would afford a constant and cheap supply of these articles. Coals and labour are also cheap.

The proprietor is prepared to sell or lease these valuable premises, and, if it suits the convenience of the purchaser or lessor, is not indisposed to retain an interest in the works, or to take in a partner.

The property is leasehold, having 37 years unexpired, the rent being £50 per annum.

For further particulars, apply to JOHN LAWRENCE, Esq., Cwm Bran Ironworks; or to THOMAS SPITTLE, Esq., Cambrian Foundry, Newport, Monmouthshire.

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Was PUBLISHED on THURSDAY LAST.

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III. GOLD FIELDS AND GOLD MINERS.
IV. CONTRIBUTIONS TO THE LIFE OF RUBENS.
V. THE CAMPAIGN OF 1815.
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No. 1 substance.	0 3	0 4	0 6	0 7½	0 9	0 10½	1 0	1 1½	1 3	—	—	—	—	—	—	—	—
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With which is united the Rolling Stock Company of Ireland (Limited).
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By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

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	Dia.	Height.				Dia.	Height.	
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400 „	43	× 83	9 9 0	50 „	24	× 36	2 15 0
300 „	37	× 84	7 7 0	40 „	21	× 38	2 5 0
252 „	35	× 79	6 10 0	30 „	21	× 30	1 15 0
200 „	33	× 72	6 0 0	25 „	19	× 30	1 5 0
150 „	30	× 66	5 5 0	20 „	19	× 26	1 2 0
100 „	27	× 55	4 10 0	10 „	15	× 21	0 15 0

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3 „	5 0	4 „	6 0

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THE MINING SHARE LIST

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
1000	Alderley Edge (Cheshire) [L.]*	10 0 0	—		7 18 6	0 10 0	May, 1862
4000	Bedford United (copper), Tavistock†	2 6 8	—		13 0 0	0 2 6	Dec. 1862
240	Boscean (tin), St. Just†	20 10 0	—		36 10 0	1 0 0	Mar. 1862
200	Botallack (tin, copper), St. Just	91 5 0	—		455 15 0	6 0 0	Nov. 1862
916	Cargoll (silver-lead), Newlyn	15 5 7	43	42 44	1 0 0	1 0 0	Nov. 1862
1000	Carn Brea (copper, tin), Illogan†	15 0 0	65	60 65	273 10 0	2 0 0	Feb. 1862
256	Copper Hill (copper) Redruth	48 0 0	65	70 75	9 10 0	2 10 0	Sept. 1862
12000	Copper Miners of England	25 0 0	—		7¼ per cent.		Half-yrly.
350000	Ditto ditto (stock)	100 0 0	—		1 per cent.		Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0	—		7 12 0	0 4 0	July, 1862
512	Creegbrawse and Penkevil, St. Colomb	—	—		0 10 0	0 10 0	Jan. 1862
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		7 13 0	0 5 0	July, 1862
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		247 10 0	4 0 0	Sept. 1862
380	Derwent Mines (sil.-lead), Durham	300 0 0	—		147 0 0	5 0 0	June, 1862
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	510	500 510	826 0 0	10 0 0	Nov. 1862
358	Dolcoath (copper, tin), Camborne*	128 17 6	605	600 605	693 10 0	7 0 0	Dec. 1862
3000	Dyfngwm (lead), Wales	12 6 6	10½		0 15 0	0 2 6	Sept. 1862
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	56	53 55	105 0 0	1 0 0	Nov. 1862
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	46	47¾ 48¼	5 17 6	1 0 0	Jan. 1863
300	East Darren (lead), Cardiganshire*	32 0 0	—		84 10 0	1 0 0	Oct. 1862
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		320 0 0	5 0 0	Dec. 1862
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		—	—	July, 1862
5000	Frank Mills (lead), Devon	3 18 6	1½		0 16 0	0 2 0	Mar. 1862
1798	Great Wheal Fortune (tin), Breage	18 6 0	33	32 33	3 0 0	0 10 0	Oct. 1862
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	—		2 2 6	0 5 0	Sept. 1862
10240	Gunnis Lake (Clitters' Adit)	0 2 0	—		0 3 0	0 1 6	Mar. 1862
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	50	49 51	21 10 0	1 15 0	Oct. 1862
1000	Hibernian Mine Company	92 6 2	—		9 0 0	0 15 0	Sept. 1862
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—		399 10 0	4 0 0	Nov. 1862
9000	Marke Valley (copper), Caradon	4 10 6	8¼	8⅞ 9⅛	2 6 6	0 2 6	Jan. 1863
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—		99 18 0	7 0 0	Nov. 1862
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1	0 7 6	Aug. 1862
5936	North Treskerby (copper), St. Agnes	1 9 0	4¼	4⅛ 4⅜	0 3 0	0 1 6	Dec. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—		0 10 4	0 0 8	Mar. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	6		36 16 6	0 7 0	Nov. 1862
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		47 10 0	10 0 0	Oct. 1862
400	Phœnix (copper and tin)	—	—		—	—	
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	42	42 44	66 5 0	1 5 0	Nov. 1862
6000	Rosewall Hill and Ransom United	2 16 0	3⅜		0 8 6	0 2 6	Sept. 1862
4026	Rosewarne Consols (copper)	3 7 6	—		0 2 0	0 2 0	Oct. 1862
16	Rhosesmor (lead)	50 0 0	—		1250 0 0	100 0 0	Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	400	390 400	391 0 0	5 0 0	Nov. 1862
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	47½	46 48	73 10 0	1 0 0	May, 1862
5000	South Exmouth (lead), Christow	1 0 0	5⅛		0 5 0	0 5 0	Dec. 1862
496	S. Wh. Frances (cop.), Illogan* [S.E.]	18 18 9	95	85 90	365 5 0	1 0 0	Jan. 1863
500	South Woodley	—	—		0 6 0	0 6 0	June, 1862
280	Spearne Moor (tin, copper), St. Just	31 17 9	—		9 15 0	1 0 0	June, 1862
940	St. Ives Consols (tin), St. Ives†	8 0 0	—		485 10 0	0 10 0	Aug. 1862
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	14	13 13½	11 18 6	0 5 0	Dec. 1862
1000	Trumpet Consols (tin), near Helston	11 10 0	—		11 0 0	2 0 0	Mar. 1862
4200	Vigra and Clogau (copper) [L. £5]	2 15 0	32	29 31	4 12 6	1 0 0	Oct. 1862
6000	West Basset (copper), Illogan [S.E.]	1 10 0	14		23 6 0	0 6 0	Sept. 1862
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0	30	32½ 35	101 1 3	0 10 0	Oct. 1862
6400	West Fowey Consols (tin and copper)	7 10 0	—		0 19 0	0 3 0	May, 1862
1024	West Penstruthal	4 0 0	—		2 19 6	2 19 6	May, 1862
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	295		368 0 0	5 0 0	Dec. 1862
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	80	75 80	591 10 0	2 0 0	Dec. 1862
1000	Wheal Basset and Gryll's (tin)	7 0 0	18		1 0 0	1 0 0	Dec. 1862
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0	20	19 21	28 6 0	0 7 6	Dec. 1862
1024	Wheal Gryllis (tin), Perranuthnoe	2 4 0	33		2 2 0	0 10 0	Sept. 1862
1024	Wheal Hearle (tin), St. Just	9 13 8	—		0 5 0	0 5 0	May, 1862
4800	Wh. Ludcott and Wrey (lead), St. Ive.	2 10 8	9½	8¾ 9¼	3 2 0	0 10 0	Jan. 1863
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6	42	41 43	75 5 0	1 0 0	Nov. 1862
100	Wheal Mary (tin), Lelant	36 2 6	—		284 5 0	4 0 0	Mar. 1862
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]†	8 0 0	16	16 17	56 17 6	0 10 0	Dec. 1862
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		310 13 0	7 10 0	Nov. 1862
128	Wheal Prosper (tin), Lanivet	3 0 0	—		—	4 10 0	June, 1862
396	Wheal Seton (tin, copper), Camborne	58 10 0	245	260 270	144 15 0	3 0 0	Dec. 1862
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	18½	18¼ 18½	46 2 6	0 10 0	Nov. 1862

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
700	Aberdovey (silver-lead), Merioneth	1 10 0	—		0 10 6	0 10 0	Mar. 1859
4943	Alfred Consols (cop.), Phillack [S.E.]	3 15 11	—		20 3 0	0 2 6	April, 1859
200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0	—		9 0 0	4 0 0	April, 1861
256	Condurrow (cop., tin), Camborne	35 0 0	—	95 105	85 0 0	2 0 0	June, 1857
2450	Cook's Kitchen (copper), Illogan	17 0 9	33	31½ 32½	1 7 0	0 7 0	May, 1862
4076	Devon and Cornwall (copper)	5 16 3	—		0 10 0	0 2 6	Feb. 1859
672	Ding Dong (tin), Gulval	40 18 6	—		16 7 6	1 10 0	Mar. 1857
3800	Drake Walls (tin, copper), Calstock	2 1 0	—		0 15 0	0 1 6	June, 1862
4940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3	0 2 6	June, 1860
6000	Great South Tolgus [S.E.], Redruth*	0 14 6	7½	6¼ 6¾	7 18 6	0 5 0	Dec. 1861
119	Great Work (tin), Germoe	100 0 0	—		221 10 0	7 10 0	Feb. 1857
5000	Kelly Bray (lead, copper), Callington	4 15 6	⅞	¾ ⅞	0 6 0	0 2 0	Feb. 1860
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0	5 0 0	May, 1860
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	19⅝	19⅞	14 7 11	0 7 0	Dec. 1861
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	—		0 3 6	0 1 0	Sept. 1861
470	Newtownards Mining Co., Co. Down	50 0 0	—		56 0 0	1 0 0	Sept. 1858
6000	North Downs (copper) Redruth	2 3 4	2⅞	2⅝ 2⅞	0 10 0	0 2 6	May, 1862
1772	Polberro (tin), St. Agnes	—	—		6 19 6	0 10 0	Dec. 1861
2000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 17 0	⅝		0 10 0	0 2 6	July, 1857
6000	Tolvadden (copper), Marazion	0 15 2	3⅛	3⅛ 3¼	0 13 6	0 3 0	Mar. 1860
9900	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0	1		5 6 0	0 2 6	Jan. 1861
572	Trelyon Consols (tin), St. Ives	12 0 0	15½		7 0 0	0 10 0	Sept. 1860
1024	Wendron Consols (tin), Wendron	11 13 10	11	10½ 11	8 15 0	1 0 0	Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
256	West Damsel (copper), Gwennap	38 10 0	—		45 0 0	1 0 0	May, 1860
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0	52½		929 0 0	2 0 0	Mar. 1861
128	Wheal Friendship (copper), Devon	50 0 0	—		2400 10 0	5 0 0	Feb. 1861
512	Wheal Jane (silver-lead), Kea	3 10 0	—		13 10 0	1 0 0	Mar. 1862
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	8½		8 10 0	0 10 0	April, 1862
4295	Wheal Kitty (tin), St. Agnes	4 19 6	4	4 4½	0 18 6	0 2 0	July, 1860
5000	Wicklow (copper) [L.], Wicklow	5 0 0	39½	39½ 40	43 17 6	2 0 0	Oct. 1861

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
2464	Burra Burra (cop.), South Australia.	5 0 0	—	100	285 0 0	5 0 0	Oct. 1861
6000	Central American (silver) [L.]	5 0 0	—		2 2 9	0 14 6	Oct. 1862
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	22	20 22	98 12 0	1 0 0	Jan. 1862
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	9		6 18 0	0 10 0	Nov. 1862
15000	East Indian Coal, Calcutta [L.]	10 0 0	—		7½ per cent.		Yearly.
70000	English and Australian [S.E.]	5 0 0	—		1 7 6	0 2 6	Feb. 1862
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	4½		0 2 6	0 2 6	May, 1862
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	—		19 5 0	1 0 0	June, 1862
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	1 1¼	0 10 0	0 1 0	June, 1862
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	8	7 8	8 16 2	0 5 0	Sept. 1862
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	2		0 19 9	0 1 0	Feb. 1862
08815	Mariquita and New Granada [S.E.]	1 0 0	—		0 9 6	0 1 6	July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅝	1½ 1¾	0 6 0	0 1 0	July, 1862
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	57	55 57	54 15 0	4 0 0	Dec. 1862
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	5¾	5¼ 5¾	2 1 6	0 5 0	Oct. 1862
20000	West Canada Mining Company [L.]	1 0 0	—		0 2 0	0 2 0	Nov. 1862

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	—		4 5 0	0 15 0	Nov. 1853
10000	Gt. Barrier Land, Min., &c., N.Ze. [L. £5]	4 10 0	—		15 per cent.		May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	—		1 0 0	1 0 0	June, 1855

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1¼	1 1¼	Sept. 1858
20000	Beariz (tin) [L. £1]	0 10 0	—		Oct. 1862
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	1 0 0	—	¼ ½	
25000	Capula (silver), Mexico [L. £2] [S.E.]	0 10 0	—	⅜ ⅝	Jan. 1862
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	—		July, 1862
10000	Copiapo Smelting [L.], Chili	10 0 0	—		Fully paid.
100000	Don Pedro North Del Rey (gold), Brazil [L. £1]	0 10 0	—		Aug. 1862
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	⅝	⅜ ⅝	Fully paid.
25000	East del Rey, Brazil [L. £3]	1 0 0	2⅛	1⅞ 2⅛	Sept. 1861
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 7 6	—		Mar. 1862
15000	Elbe Colliery Company [L.]	1 0 0	—		Fully paid.
30000	Ellerslie and Bardowie, Jamaica	0 18 0	—		July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—		Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	⅝	⅝ ¾	June, 1862
24000	Hindostan (copper), Bengal [L. £5]	1 10 0	⅝		May, 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0	—		June, 1860
10000	Karbitz Colliery Company [L.]	1 0 0	—		Fully paid.
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—		Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	2⅝	2½ 2¾	Fully paid.
2000	New Burra Burra (Australia)	5 0 0	—		Aug. 1862
60000	New Granada (gold), South America [S.E.]	1 0 0	—		Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	—		Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 17 6	¾		
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	1¼		Nov. 1862
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 15 0	—		April, 1862
17000	Quebrada (copper), Venezuela [L. £10]	1 10 0	—		July, 1862
60000	Santa Barbara (gold), Brazil [L. £1]	0 10 0	1		Mar. 1862
120000	Scottish Australian Mining Company [L. £1]	0 10 0	1½	1¼ 1½	
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—		May, 1860
50000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	—		Fully paid.
12000	Teplitz Colliery Co. [L. £5]	2 0 0	—		
10000	Vancouver (coal) [L. £10]	5 0 0	5		
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 15s. pd., 25,000 £1 pd.]		—		
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1859
12000	Wheal Ellen, South Australia [L.]	5 0 0	—		Fully paid.
24525	Wheal Jamaica (copper)	1 0 0	—		Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	—	⅝ ⅝	Fully paid.
45000	Yudanamutana (copper), South Australia [L.] [S.E.]	3 0 0	3⅝	3⅜ 3⅝	Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
600	Aberffrwd	0 10 0	—		
35000	Atlas Min. and Smelt. [L. £1]	0 10 0	—		Nov. 1862
6000	Bagtor [L. £2]	1 8 0	—		Oct. 1862
400	Baldwin, I. of Man [L. £5]	2 5 0	3¼		Jan. 1863
1624	Balleswidden (tin), St. Just	14 8 7	—		Mar. 1862
10000	Bampfylde (copper), Devon	1 0 0	—		Aug. 1860
30000	Barmouth Cons. (gold) [L. £1]	0 5 0	—		Aug. 1862
4000	Bedford Consols (copper)	2 5 0	—		Nov. 1862
2000	Berehaven (copper), Ireland	1 0 0	—		
200	Billins (lead) [L. £30]	25 0 0	—		Aug. 1862
1248	Boscaswell (tin, cop.), St. Just	6 15 0	—		Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	7 10 0	—		Sept. 1862
160	Bosorne & Bollowall, St. Just	6 5 0	—		Dec. 1860
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 6 0	—		Aug. 1862
6000	British (tin & cop.), [L. £1 10s.]	0 12 0	—		
•4000	Brookwood (cop.) Ashburton	1 12 6	1⅛		
5000	Bronfloyd (ld.), Cardigan. [L.]	2 7 6	—		June, 1862
112	Bron-Haulog (ld.), Denbighsh.	20 0 0	—		No call.
5120	Brynambor (ld.), Cardi. [L. £5]	2 3 0	—		Nov. 1862
200	Brynford Hall (lead), Flint	25 0 0	—		April, 1862
500	Bryn Gwiog (lead), Flint	6 0 0	31	28 31	April, 1862
1960	Bryntail, Llanidloes, Montgo.	7 6 6	—		Oct. 1862
6380	Buller and Basset Unit. (cop.)	3 16 6	—		Sept. 1862
1200	Burra Burra (cop.), Kenwyn	2 10 0	—		April, 1862
2200	Burren (lead, calamine) [L. £5]	5 0 0	—		June, 1862
915	Calvadnack, Wendron	22 17 0	—	6 6⅛	Nov. 1862
1000	Camborne Consols (copper)	17 10 0	—		Oct. 1862
4600	Camborne Vean & Wh. Francis	8 14 4	1⅞		Oct. 1862
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	1⅜		Aug. 1862
914	Caradon Cons. (cop.), St. Cleer	25 9 6	14		Dec. 1862
4046	Caradon Hill (copper)	2 1 6	26		July, 1862
6000	Caradon United (copper)	0 10 0	—		Sept. 1862
10000	Cardigan Consols	—	—		July, 1862
2580	Carmarthen United	5 0 0	—		Fully paid.
6000	Carn Camborne (copper)	0 12 0	17s.	15s. 17s.	Jan. 1863
4870	Carnewas (ld., cop.), Mawgan	1 8 0	—		Nov. 1862
3000	Carn Vivian (tin, cop., lead)	2 1 6	—		Nov. 1861
2048	Carnyorth (tin), St. Just	4 0 0	—		Sept. 1862
20000	Carysfort [3200 £2½ pd., 16800 £1 pd.]		—		
10000	Castleward, Ireland [L.]	1 0 0	—		Fully paid.
2500	Cefn Cilcen (lead), Flintshire	1 19 0	—		Nov. 1862
2500	Central Minera (lead) [L. £5]	1 19 0	1		Oct. 1862
6000	Charlotte Untd., Perranuthnoe	3 8 1	—		Dec. 1862
4000	Clara Unit., Ponterwyd [L. £6]	1 12 0	—		July, 1862
787	Cljah & Wentworth (tin, cp.)	30 15 0	—		Dec. 1862
3285	Coed Mawr Pool (lead) [L.]	4 13 6	—		Mar. 1862
16000	Coolartra and Bond, Ireland	1 0 0	—		Sept. 1862
50000	Connorree (cop., sulph.) [L.]	1 0 0	1	1	Fully paid.
7000	Cornubia (tin)	2 0 0	—		Oct. 1862
861	Crane (copper), Camborne	15 10 0	9	6 7	Dec. 1862
30000	Craven Moor (ld.), Yorkshire	0 10 0	—		No call.
12000	Crelake (cop.), Tavistock	—	—		No call.
8000	Crookhaven (cop.) [L. £2½]	1 10 0	—		Oct. 1861
6000	Crowan Cons. (cop.) [L. £2]	0 15 0	—		Sept. 1862
2000	Crowlwm (lead), Llanidloes	1 10 0	—		No call.
6000	Cuddra (cop., tin), St. Austell	3 8 0	—		Sept. 1862
1800	Cwmbrane, Carmar. [L. £3]	2 0 0	3¼	2¾ 3¼	Feb. 1862
30000	Dale, N. Staf. [L.] [21000 £1 pd., 9000 7s. 6d. pd.]				Sept. 1862
2000	Deep Level Minera [L. £5]	3 5 0	—		Feb. 1862
12000	Dev. New Copper Co. [L. £2]	—	—		
12000	Devon Union (copper) [L.]	1 0 0	—		Fully paid.
4566	Devon Wheal Buller (copper)	4 10 0	—		Aug. 1862
20000	Dolfrw-y-nog (gold) [L. £1]	0 10 0	¾	½ ¾	Sept. 1862
1000	Durlo (tin), Lelant	8 2 0	—		Oct. 1862
4000	Dulta (tin) [L. £1]	—	—	1¾	Fully paid.
4096	East Alfred Consols (copper)	6 0 11	—		Dec. 1862
3000	E. Beam (tin), St. Aus. [L. £2]	1 5 0	—		July, 1862
4096	East Brookwood (copper)	1 3 0	1½		May, 1862
5000	E. Bronfloyd (sil.-ld.) Card. [L]	2 0 0	—		
6000	East Carn Brea (cop.) Redruth	3 11 0	11⅝	11¼ 11⅝	Oct. 1861
2000	East Chiverton (lead)	—	5	4¾ 5¼	
50000	E. Clogau (gold), Merio. [L. £1]	0 5 0	⅝		May, 1862
6400	East Crinnis and South Par.	2 14 0	—		May, 1862
6000	East Damsel (cop.), Gwennap	1 11 0	—		Mar. 1862
4000	East Devon Gt. Consols (cop.)	1 9 0	—		Jan. 1863
2048	E. Falmouth (s.-ld.), Kenwyn	3 15 6	—		Nov. 1862
6000	E. Grenville (cop.), Camborne	1 9 6	51s.	49s. 51s.	Nov. 1862
4000	E. Gunnis Lake & S. Bedf. (cp.)	7 1 0	—		Jan. 1863
6145	East Jane (sil.-ld.), Cardinham	1 9 6	3½		Oct. 1862
1024	East Margaret	17 15 0	—		Oct. 1862
8000	E. Polberro, St. Agnes [L.]	0 10 0	—		May, 1861
4096	E. Providence (tin), Uny Lel.	2 10 4	—		Dec. 1862
5000	E. Rosewarne (cp., tin), Gwin.	2 15 0	3	3¼ 3⅛	Sept. 1862
5610	East Seton (cop.), Camborne	0 7 0	—		Nov. 1862
256	East Tolgus (copper), Redruth	72 0 0	—		Oct. 1862
1000	E. Trefusis (cop.), Gwennap	8 14 7	—		Aug. 1862
1024	E. Treskerby (cop.), Redruth	6 5 0	—		Nov. 1862
1190	E. Wheal Agar (cop.), St. Cleer	9 12 0	—		July, 1862
4096	East Wheal Fortune	1 0 0	1½		Sept. 1862
2048	East Wheal Gryllis (tin, cop.)	0 10 0	3½		
2048	E. Wh. Lovell (tin), Wendron	2 13 6	—		
6000	East Wheal Neptune	0 10 0	—		
4000	E. Wh. Russell, Tavis. [S.E.]	7 19 0	4¼	3⅞ 4⅛	Nov. 1862
10000	Ely Merthyr Col. [L. £2 10s.]	1 5 0	—	1½	
6000	Furze Hill Wood Cons., Bucki.	0 15 0	—		Sept. 1862
114	Garden (tin), Morvah	35 0 0	—		Feb. 1862
1000	Garreg (lead), Flint	5 4 0	—		Dec. 1862
4000	Gawton (copper), Tavistock	1 17 0	⅝	¾	Oct. 1862
1024	Gelliffowiler (ld.), Holywell	0 2 6	—		June, 1861
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	5⅛	5⅛	
30000	Glasgow Caradon Cons. [L.]	1 0 0	—		Fully paid.
4892	Goginan (silv.-ld.) [1900 £12½, 2992 £1]		—		July, 1860
6144	Gonamena (copper), St. Cleer	3 8 0	2⅝	2⅜ 2⅝	Nov. 1862
2000	Goonzion (copper), St. Neot	0 9 0	—		Oct. 1862
486	Gramb. & St. Aub. (cp.) [S.E.]	54 0 0	20	19 21	Jan. 1863
5000	Great Brigan (copper)	4 17 0	—		Dec. 1862
4096	Great Caradon (cop.), St. Ive.	2 0 0	1½	1¼ 1¾	Dec. 1862
15000	Great Laxey (lead) [L. £4]	—	—		Fully paid.
6000	Great North Downs (copper)	2 0 0	—		Aug. 1862
30000	Great North Tolgus [L. £1]	0 7 6	—		Nov. 1862
10104	Great Onslow Cons., Camelfd.	3 10 9	—		Dec. 1860
6000	Gt. Retallack (sil.-ld., Plende)	1 17 6	12s.		Dec. 1862
52000	Great Tregune Consols (cop.)	0 5 0	—	9s	
10000	Great Treveddoe (coppe.)	0 14 0	—		Aug. 1861
6000	Great Tywarnhaile (copper)	3 10 0	—		June, 1861
3730	Great Wheal Baddern (tin)	6 6 0	—		Dec. 1862
6000	Gt. Wh. Busy (cop., tin), Ken.	15 0 0	—	4⅛	Dec. 1862
5000	Grosvenor (ld.) [2500 £1 pd., 2500 7s. pd.]		—		
4910	Gurlyn (cop., tin), St. Erth	1 18 11	—		Feb. 1862
8634	Gwydyr Park Con., Llanrwst	0 18 6	—		Dec. 1861
6400	Harwood (ld.), Durham [L. £1]	0 5 6	1⅛		Nov. 1861
7219	Hawkmoor (tin, cop.) Calstock	3 0 6	—		May, 1862
1000	Haye Valley (tin), Callington	0 4 0	1½		
6000	Hingston Down (cop.), [S.E.]	5 5 0	—	3 3¼	Dec. 1862
10000	Holmbush [5000 £5 2s. pd., 5000 5s. pd.]		—		
6000	Illogan (tin and copper)	0 5 0	⅞		July, 1862
40	Imperial Silver-Lead, Dolgelly	65 0 0	—		Jan. 1862
6000	Keswick (lead), Portinscale	5 6 6	—		Mar. 1862
6000	Lady Bertha (cop.) [S.E.]	2 2 0	1⅜	1 1¼	Oct. 1862
963	Lelant Cons. (tin), Uny Lelant	34 0 0	—		Sept. 1862
1019	Leeds & St. Aubyn (tin, cop.)	16 4 4	—		Feb. 1862
240	Llangan (ld.), Glamor. [L. £25]	5 0 0	—		Aug. 1862
500	Long Rake (lead), Flint	14 0 0	16	14 16	Sept. 1862
2000	Lower Park Denbighshire [L.]	3 3 0	—		Nov. 1862
10000	Lower Taldrws [L. £2½]	1 10 0	—		Oct. 1861
6000	Maudlin	3 14 0	—		Dec. 1862
4480	Merllyn (lead), Flint	3 16 6	¼	⅛ ¼	Dec. 1862
22000	Merryfield (lead) [L.]	0 12 0	—		May, 1860
3475	Michell (lead), Flint	0 2 6	—		Nov. 1861
1024	Mill Pool	15 15 0	—		Jan. 1863
5000	Molland (cop.), S. Moulton	2 9 6	¼		Nov. 1862
1024	Nangiles (tin, copper), Kea	12 10 0	8	7 8	Dec. 1862
50	Nanteos (sil.-ld.), Llanbardan	—	—	37½	Jan. 1862
5000	Nanteos and Penrhiw [L. £4]	3 12 0	—		
512	Nant Minera [L. £20]	4 0 0	—	3¾ 4¼	Jan. 1863
2400	Nant-y-Iago (ld.), Merioneth	3 12 6	—		Nov. 1862
250	Nanty Mines (ld.), Montgom.	20 0 0	—		Fully paid.
6400	Nether Heath (lead), Dufton	0 15 6	—		April, 1860
6400	N. Crow Hill (ld.), St. Stephen	2 7 6	—		Oct. 1862
6000	New E. Birch Tor and Vitifer	—	—		
6514	New E. Wh. Russell, Tavistock	0 6 0	—		Oct. 1862
400	New Hendra (tin, cop.), Breage	0 15 0	—		Oct. 1862
6000	New S. Caradon (cop.), St. Cleer	0 10 6	—		Dec. 1862
6000	New Treleigh Cons., Redruth	1 13 0	—		Nov. 1862
1024	New Wendron	6 0 0	—	4 5	
6000	New Wheal Prospidnick	0 7 6	—		Nov. 1862
400	New Wh. Seton) cop.), Camb.	21 10 0	150	150 155	Dec. 1862
2500	N. Wh. Vaddon (tin), Marazion	1 8 0	—		Oct. 1862
6000	Nidderdale (ld.), Yorks. [L. £1]	0 15 0	—		Jan. 1861
4500	No. Budnick and West Mount	0 7 0	—		Aug. 1862
1024	North Buller (cop.), Redruth.	22 17 6	—	2¼ 3⅛	Aug. 1862
6000	Nor. Clifford (cop.), Gwennap	0 5 0	—		Nov. 1860
4000	North Cornwall (Endellion)	—	—		No call.
20000	North Devon (sil.-ld.) [L. £1]	0 10 0	—		July, 1862
5000	N. Dolcoath (cop.), Camborne	2 11 6	—	1¾ 2	Nov. 1862
1000	North Fortescue (copper)	1 14 0	—		Oct. 1862
2500	North Frances, (cop.) [S.E.]	13 16 0	—		Dec. 1862
1366	N. Grambler (cop.), Redruth	2 15 0	—		Nov. 1862
6000	N. Gt. Work, Breage [L. £3]	2 1 0	—		July, 1862
6000	N. Hafod (sil.-ld.), Car. [L. £2]	1 5 0	—		Aug. 1862
16000	N. Hallenbeagle p.) (tin, c[L.]	—	—		Dec. 1861
2000	North Jane (tin, silver-lead)	4 15 0	—		July, 1862
6000	North Kit Hill (tin, copper)	0 2 6	—		Sept. 1861
6000	North Laxey (lead) Isle of Man	—	—		Fully paid.
2000	N. Levant (tin, cop.), St. Just	7 0 0	—		Aug. 1862
15000	North Minera (lead) [L.]	1 0 0	11s.	11s. 12s.	Fully paid.
4000	North Phœnix (copper)	3 18 6	7	6 7	Sept. 1862
32	No. Pool (tin & cop.), Illogan	125 0 0	—		Nov. 1862
6000	North Porthilly (silv.-lead)	—	—		Aug. 1862
700	N. Roskear (cop.), Camborne	21 5 0	60½	64¼ 65¼	Jan. 1863
5000	N. Treiether (sil., cp.), Padstow	1 0 0	—		Feb. 1860
6000	N. Wh. Basset (cop., tin) [S.E.]	2 12 0	3	2¾ 3	Dec. 1862
1024	North Wheal Busy (cop., &c.)	9 12 7	—		Dec. 1862
5610	North Wheal Crofty [S.E.]	2 3 0	5¾	5 5¼	Nov. 1862
4800	North Wh. Ludcott (St. Ive)	1 0 0	1⅞		Dec. 1862
6144	N. Wh. Robert, Samp. Spiney	2 12 11	—		July, 1861
4108	North Wheal Trelawny (lead)	3 9 0	—		Oct. 1862
5900	North Wheal Vor (tin), Breage	3 0 0	—		June, 1861
4000	N. Wrey (ld.), St. Ive [L. £2]	0 17 6	—		Feb. 18[illegible]
4096	Okel Tor (cop.), Calstock	6 6 6	6		Sept. [illegible]
6000	Old Wh. Neptune (cop.), [L.]	1 17 6	—		Nov. [illegible]
800	Pant-y-Buarth (ld.) [L. £10]	7 0 0	—		Sept. [illegible]
1000	Pant-y-pydew (lead)	4 2 6	—		Oct. 1862
10000	Parkgwyn (tin) [L. £2 10s.]	1 5 0	—		Aug. 1862
8465	Pedn-an-drea United (tin)	3 18 6	—		Oct. 1862
5000	Pendeen Consols, St. Just	3 17 0	6¼	5⅛ 6	April, 1862
1000	Pengenna (ld., sil.), St. Kew.	5 0 0	—		July, 1862
5000	Penhalls (tin), St. Ann's	1 10 0	—		Oct. 1862
6000	Penrait (sil. ld.), Merion. [L.]	2 2 0	—		Aug. 1862
200	Pentre Lygan (lead) [L. £30]	20 0 0	—		Mar. 1861
6000	Polhigey Moor (tin), Wendron	1 6 6	—		Sept. 1862
6400	Prideaux Wood (tin, cop.)	3 14 0	—		Sept. 1862
6000	Prosper Uni. (tin, cp.), St. Hilary	6 11 6	1	¾ 1	Dec. 1862
11789	Redmoor (cop., tin), Callington	0 11 0	—	5s. 6s.	July, 1862
5000	Rhafua (lead)	1 0 0	—		
2500	Rhoswydol and Bacheiddon	12 5 0	—		Oct. 1861
3000	Rhyscog (silver-lead) [L. £5]	1 0 0	—		Mar. 1861
10000	River Tamar Copper [L.]	1 0 0	—	¾	Fully paid.
4096	Rosewarne United (cp., tin)	3 8 0	1		Nov. 1862
5000	Round Hill (cop., ld.), Salop.	2 5 6	—		Mar. 1858
8000	Royalton (tin) [£1]	0 10 0	—		Aug. 1862
2000	Scorrier Con. (tin, cp.), St. Agnes	4 7 6	—		Nov. 1862
10000	Sigford Con. (cop., tin) [L. £1]	0 16 6	—		Sept. 1862
12500	Silver Moun. (lead) [L. £2]	2 0 0	—		Fully paid.
100	Silver Rake (lead) [L. £20]	7 2 6	—		July, 1862
15000	Silv. Vein, St. Winnow [L. £1]	0 12 6	—		July, 1862
6000	Smith's Wood (tin, cp.) [L. £2]	1 18 0	—		Nov. 1862
600	Snowbrook (sil. lead) [L. £5]	4 0 0	—		
512	South Basset (cop.), Gwennap	14 10 8	8½	7½ 8½	Aug. 1862
100	South Bryn Gwiog (lead)	7 0 0	—		July, 1862
6400	So. Buller & W. Penstruthal.	0 12 0	—		May, 1860
4096	S. Caradon Wh. Hooper (cop.)	3 7 0	⅞		Oct. 1862
6000	So. Carn Brea (cop.) [S.E.]	6 7 0	2⅜		Oct. 1862
6138	S. Condurrow (tin, cp.), Camb.	2 8 0	—		Dec. 1862
2283	Sou. Crenver (cop.), Crowan.	11 9 0	—		Dec. 1862
128	S. Crinnis (cop., St. Austell	19 0 0	—		
6000	South Darren (ld.) [L. £3½]	2 16 0	—		July, 1862
6000	S. Dolcoath & Carnarthen Con.	2 13 0	—		Dec. 1862
5000	S. Foxdale (ld.) I. of Man [L. £5]	1 0 0	—		
6000	South Gernick (tin), Crowan.	0 2 6	—		Oct. 1860
2000	South Gorland	3 15 0	—		Dec. 1861
1024	South Herodsfoot	3 15 0	4½	4¾ 5¼	Jan. 1863
4000	South Minera [L. £5½]	2 12 0	6		May, 1862
5425	So. Phœnix (cop.) Linkin.	6 11 7	—		Nov. 1862
1024	South Tresavean, Gwennap	4 3 9	—		Oct. 1862
4096	S. Wh. Betsy, Mary Tavy, Dv.	1 7 9	—		Sept. 1862
937	So. Wh. Crofty (cop.), Illogan	10 18 10	21	29 31	Oct. 1862
1024	S. Wh. Ellen (cp.), St. Agnes	9 18 2	—		Aug. 1861
1000	South Wh. Kitty (tin), Lelant	1 10 0	—		Oct. 1861
6000	So. Wh. Leisure (tin & cop.)	0 2 0	—		May, 1862
1024	S. Wh. Lovell (tin), Wendron	1 10 7	—		May, 1862
400	So. Wh. Seton (cop.) Camborne	37 3 0	26		Dec. 1862
794	Spearne Cons. (tin), St. Just.	6 12 0	—		Mar. 1862
970	St. Aubyn and Gryll's (cp., tin)	7 14 6	—		Aug. 1860
15000	St. Cuthbert Ld. Smelt. [L. £5]	1 0 0	1⅜	1¼ 1⅜	Nov. 1862
40000	St. David's (gold) [L. £2 10s.]	1 0 0	1⅜	1 1½	Nov. 1862
4000	St. Day United (tin), Redruth	2 3 9	—	3¼ 3⅝	May, 1862
1024	St. Ives Wheal Allen (tin)	9 13 7	—		Jan. 1863
6000	St. Just (tin & cop.) [L. 2½]	2 0 0	—		Dec. 1862
640	Stamp Office (lead), Mold	1 0 0	—		Jan. 1862
920	Stray Park (cop., tin) [S.E.]	29 17 0	39	37½ 38½	Nov. 1862
3000	Tees Side (ld.), Cumb. [L. £1]	0 13 0	—		Aug. 1861
6000	Tolcarne (cop.), Camborne	1 8 0	—		July, 1862
2000	Trefulack Uni. (tin), St. Enoder	3 5 0	—		Sept. 1861
5000	Treloweth (copper), St. Erth.	6 10 8	—		June, 1862
1024	Trencrom (tin), Uny Lelant	12 2 3	—		Oct. 1862
3270	Tresellyn and Scaddick Cons.	1 8 10	—		June, 1862
5600	Trevenen and Tremenheere	6 8 0	—	3 3⅛	Sept. 1862
4096	Treweatha (sil.-ld.), Menhen.	5 3 6	—		Nov. 1862
2048	Treworlis (tin), Wendron	3 18 10	—		Dec. 1862
2500	Trimley Hall [1250 £1 pd., 1250 7s. 6d. paid]				
4000	Trumpet Unit. (tin), Wendron	1 7 0	8s.	10s. 12s.	Jan. 1863
3000	Tyne Head (ld., cop.) [L. £1]	0 14 0	—		Oct. 1862
800	Tynewydd (sil.-ld.), Cardigan.	0 5 0	—		Dec. 1861
1024	Tyringham Consols (tin)	2 0 0	—		Oct. 1861
20000	Vale of Towy (lead), Carmar.	0 15 6	7s.	5s. 7s.	Jan. 1863
4000	Wentnor [L. £2½]	2 1 0	—		July, 1862
3000	West Alfred (copper) [L. £3]	1 0 0	—		Nov. 1861
20000	West Beam [L. £1]	0 12 6	—		Sept. 1862
100	W. Bryn Gwiog (ld.) [L. £20]	9 0 0	—		Feb. 1862
1218	W. Condurrow (tin, cop.), Cam.	7 16 3	—		Dec. 1862
16	West Denbigh (ld.), Denbigh.	35 0 0	—		Oct. 1860
30000	West Devon Con. (cop.), [L.]	1 0 0	—		Fully paid.
4216	W. Great Work (tin), Germoe	0 13 6	—		Dec. 1862
6000	West Gryllis (tin)	0 2 6	—		Aug. 1862
19000	West Par Con. (cp.) St. Blazey	1 11 0	—		Dec. 1862
6000	W. Polmear (tin, cp.), St. Austell	0 15 6	—	⅛ ¼	Oct. 1862
1600	W. Rose Down (cop.), Caradon	6 12 6	20	18 20	Jan. 1863
256	West Sharp Tor (cp.) Rillaton.	143 0 0	—		Sept. 1862
1056	West Stray Park (cop.), Camb.	8 9 0	—		April, 1862
5000	West Tolcarne (cop.), Crowan	1 15 0	—		Feb. 1862
512	West Tolgus (cop.), Redruth.	29 10 0	56	61 63	Oct. 1862
5120	West Tolvadden	1 18 6	—		Oct. 1862
5481	West Trevelyan (tin, copper)	3 5 10	—	8s. 10s.	Dec. 1862
4000	West Wendron (tin), Wendron	1 0 6	—		Jan. 1862
512	West Wheal Frances, Illogan	77 5 0	—	12 14	Nov. 1862
10000	West Wheal Jane (tin, &c.)	3 1 0	—		July, 1862
1024	West Wheal Lovell, Wendron.	2 13 8	—		Mar. 1862
6000	Wheal Agar (copper), Illogan	3 14 0	—		Nov. 1862
1024	Wh. Anna (ld., blende), Perranz.	0 13 6	—		Oct. 1861
5000	Wheal Annie (cop.), Gwinear	1 13 0	—		Sept. 1862
5990	Wh. Arthur (cop.), Calstock.	3 19 0	⅝		Sept. 1862
6000	Wheal Caradon (copper)	1 0 0	—		Nov. 186[illegible]
6000	Wheal Crebor (cop.), Tavistock	1 2 0	1¼	17s. 19s.	Oct. [illegible]
512	Wh. Damsel (cp., tin), Gwennap	29 13 6	—		Oct. [illegible]
4096	Wh. Edward (cop.), Calstock	7 14 6	1¾	1¼ 1¾	Nov. 1862
4000	Wh. Emma (cp) Buckfastleigh	2 15 0	2	1¾ 2	Nov. 1861
2000	Wheal Falmouth & Sperries	3 5 0	—		Oct. 1862
6000	Wh. Grenville (copper) [S.E.]	7 15 0	5⅛	4¾ 5	Nov. 1862
5120	Wheal Harriett, Camborne	4 6 6	3⅞	4¼ 4⅛	May, 1862
6000	Wh. Harris (ld., cop.), Lifton	0 10 6	—		Feb. 1861
1024	Wheal Emily Henrietta	4 0 0	—		Nov. 1862
2048	Wheal Hope (sil.-ld.), Perran	0 18 0	—		Mar. 1862
6000	Wheal Ida (sil.-lead), St. Ive.	—	1	¾ 1	
1024	Wheal Margery (tin, copper)	17 18 0	4		
6000	Wh. Norris (tin, cp.), St. Cleer	2 10 7	—		Oct. 1862
1024	Wheal Polmear, St. Austell	3 13 9	—		Oct. 1862
6000	Wh. Pollard (cop.), St. Neot's	2 13 0	—	13s. 15s.	Jan. 1861
970	Wh. Prosper (cp., tin), Breage	10 15 0	—		July, 1862
25000	Wh. Prudence St. Ag. [L. £1]	0 2 6	—		May, 1862
240	Wh. Reeth (tin), Uny Lelant	96 10 0	—		Sept. 1862
500	Wheal Sarah (cop.), Lanivet	0 9 0	1		Dec. 1862
1024	Wh. Sicily (sil.-ld.), Broadoak	4 17 6	—		May, 1862
4096	Wheal Sidney (tin), Plympton	4 9 1	—		Oct. 1862
2048	Wh. Sithney & Carnmeal Uni.	8 0 0	—		Nov. 1862
1024	Wheal St. Andrew (copper)	5 0 0	—		Jan. 1860
512	Wh. Trannack (tin), Sithney	3 0 0	—		Oct. 1862
1022	Wh. Tremayne (tin), Gwinear	13 2 6	—		
6000	Wheal Union (cop.), Redruth	3 17 0	6	5⅞ 6⅛	Dec. 1862
6000	Wh. Unity (cop., tin), Gwinear	12 2 0	13s.		Nov. 1862
4096	Wh. Uny (tin, cop.), Redruth	9 3 6	7⅝	7⅛ 7⅝	Sept. 1862
1024	Wh. Vyvyan (cop.), Constantine	6 5 0	—		Dec. 1862
6000	Wheal Welcome (tin, copper)	1 0 0	—		April, 1859
6400	Whitford (lead), Holywell	10 16 6	—		May, 1860
944	Worvas Downs (tin), Lelant	6 7 0	—		Dec. 1862
3097	Yarner (copper), Devon	3 1 6	—		Dec. 1862

MISCELLANEOUS.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
10000	Anglo-Mexican Mint	10 0 0	—	17¼ 18¼	Fully paid.
20000	Australian Agricultural	19 0 0	—	25 26	
50000	East India Irrigation and Canal	2 0 0	—		
80000	Metrop. Rail, Carriage, &c.	4 0 0			
6000	Nerbudda (coal & iron [L. £20]	5 0 0	—	5 6	
1724	N. Bruns. and N. Scotia Land	81 0 0			
10000	Ottoman Gas [L. £5]	1 0 0	—		
15000	Royal Mail Steam	60 0 0	—	53 57	
14000	South Australian Land	2 0 0	—		

*** Those mines with [S.E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been incorporated with Limited Liability.

*** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

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